

# **TRANSPORTATION DEMAND MANAGEMENT IMPLEMENTATION, FUNDING, AND GOVERNANCE**



OFFICE OF LEGISLATIVE OVERSIGHT  
REPORT NUMBER 2009-6

DECEMBER 9, 2008

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# TRANSPORTATION DEMAND MANAGEMENT IMPLEMENTATION, FUNDING, AND GOVERNANCE

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The Office of Legislative Oversight's review of transportation demand management in Montgomery County and other communities found that the County actively promotes transit and other alternative commuting modes, especially within urban centers. However, OLO also found that the County simultaneously implements parking policies that undercut efforts to encourage commuters to choose alternative travel modes.

OLO recommends the Council act to improve the consistency of the County's transportation demand management policies and practices. As part of this, OLO recommends that the Council discuss how to establish a sustainable alternative commuting infrastructure. Practices of other places offer potential strategies for the County to consider.

## WHAT IS TRANSPORTATION DEMAND MANAGEMENT?

"Transportation demand management" refers to a set of public policy strategies and programs aimed at providing convenient and affordable alternatives to the single-occupant vehicle to maximize use of a region's alternative transportation resources.

When choosing how to travel to work, commuters weigh the relative cost, time, and convenience of alternative modes of travel against driving alone. Local governments control only some of the many factors that influence a commuter's decision to drive alone or use an alternative travel mode.

Sufficient and reliable funding for transit and other alternative commuting modes is a necessary prerequisite for persuading a high percentage of commuters to use alternative modes. For example, suppose a jurisdiction successfully persuades a large number of commuters to use an alternative mode of travel by providing cost competitive, timely, and convenient alternatives to driving alone. This may generate a need for the jurisdiction to invest additional resources in its alternative transit infrastructure (e.g., buses or bikeways) so that commuters do not become frustrated by crowded transit or other inconveniences and return to driving alone.

## MONTGOMERY COUNTY'S SERVICES AND PROGRAMS

The County's alternative transportation infrastructure includes bus and rail transit systems, bikeways, and pedestrian facilities. The County also provides services and programs to promote these and other alternative commuting modes. For example, the County requires developers and employers to implement traffic mitigation measures and provides funding to employers who offer transit subsidies to their employees. The table below summarizes County services and programs designed to promote alternative commuting modes.

Service/Program	Description
Transit	Metrorail, Metrobus, Ride On, MARC Train, and MTA (Maryland Transit Administration) Commuter Bus transit systems serve commuters.
Bikeways	A total of eight bikeways serve five County urban centers.
Pedestrian Facilities	Sidewalks, crosswalks, countdown crosswalk signals, and lighting assist pedestrians.
Traffic Mitigation	Certain developers and employers must implement traffic mitigation measures (such as limiting parking, providing carpooling or vanpooling incentives, or offering transit subsidies).
Transit Subsidies	Financial assistance is provided to employers who offer transit subsidies to employees.
Commuter Services	The County Department of Transportation: <ul style="list-style-type: none"><li>• Markets alternative transportation to workers and residents;</li><li>• Encourages employers to promote alternative transportation;</li><li>• Implements commuter assistance programs; and</li><li>• Provides personalized rideshare matching for carpools and vanpools.</li></ul>

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## TRANSPORTATION MANAGEMENT DISTRICTS

The County focuses transportation demand management efforts on urban centers. Specifically, County law establishes transportation management districts in North Bethesda, downtown Bethesda, Friendship Heights, downtown Silver Spring, and Shady Grove. (The Shady Grove district, established in 2006, remains unfunded and inactive.) The County Department of Transportation (DOT) has also designated the Wheaton Central Business District as a “Transportation Planning and Policy Area.”

The County uses different approaches to manage and finance transportation demand management activities in North Bethesda, Bethesda, Friendship Heights, Silver Spring, and Wheaton. These differences reflect the uniqueness of each area, constituent interests, and management practices that existed when the transportation management district or transportation planning and policy area was established. For example, private organizations manage the transportation management districts in North Bethesda and Bethesda (under County contract), while the County’s Department of Transportation manages programs in Friendship Heights, Silver Spring, and Wheaton.

## TRANSPORTATION DEMAND MANAGEMENT GOVERNANCE IN MONTGOMERY COUNTY

In Montgomery County, a decentralized structure of County and non-County entities shape the governance of transportation systems and transportation demand management programs. At times, this results in policies and programs that are not fully coordinated. This is common in most metropolitan areas, where governance entities may include state and local governments, regional organizations, transit systems, and parking authorities.

Some communities, notably universities with urban campuses, operate transportation demand management systems that offer a range of services that are consolidated under one centrally-managed program. In these places, a single entity promotes alternative commuting modes, offers transit incentives, operates local shuttle services, and sets parking pricing and supply policies.

## IMPACT OF PARKING POLICIES ON TRANSPORTATION DEMAND MANAGEMENT

As currently implemented, County parking policies and transportation demand management objectives often work at cross purposes to one another, simultaneously promoting alternative commuting modes and providing single-occupant drivers easy access to plentiful, low-cost, conveniently-located parking. Such parking serves as an incentive to drive alone, which arguably undercuts County efforts to encourage alternative travel modes.

Under current zoning requirements, developments in urban centers must provide nearly the same amount of parking (for similar uses) as developments in less dense parts of the County. These requirements, adopted when the County was more suburban in nature, do not fully account for transit services and traffic congestion in urban centers today.

The County’s parking management practices also encourage commuters to drive alone. The County is a significant provider of parking in urban centers (see table below). Currently, most of the County-provided spaces in Bethesda, Silver Spring, and Wheaton are designated as long-term parking, which encourages commuters to drive alone. Except for a few County parking facilities which fill during peak hours, the overall supply of parking in each district exceeds demand. Further, the County’s parking rates are generally less expensive compared to private parking rates.

**COUNTY PARKING PROVIDED IN URBAN CENTERS**

	North Bethesda	Bethesda	Friendship Heights	Silver Spring	Wheaton
<b>Short-term</b>	632	1,816	No County parking	1,252	536
<b>Long-term</b>	257	5,400		10,134	892
<b>Other*</b>	200	285		680	36
<b># of County Spaces</b>	1,089	7,501	0	12,066	1,464

\*Includes non-metered, handicapped, and government vehicle spaces

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## TRANSIT AND TRANSPORTATION DEMAND MANAGEMENT FUNDING IN MONTGOMERY COUNTY

Multiple County and non-County sources fund the County's transportation infrastructure, which includes rail and bus systems, bikeways, and pedestrian facilities. The major funding sources for the County's transit and transportation demand management services are two special funds:

- **The Maryland Transportation Trust Fund** supports State transportation programs, including operating MARC trains and MTA Commuter Buses and paying the County's contributions to WMATA. State gas tax and motor vehicle taxes are the Fund's largest revenue sources.
- **The County's Mass Transit Fund** supports operation of the Ride On bus system, transportation demand management programs, and other activities of the DOT Division of Transit Services. Mass Transit Property Tax revenue contributes about two-thirds of all Mass Transit Fund resources.

Revenue from two special districts also supports County transportation demand management activities:

- **Transportation Management District** revenue funds transportation demand management activities through a special fee that the County charges certain property owners.
- **Parking Lot Districts (PLDs)** receive revenue from parking fees and fines and a special property tax. PLD revenue must first pay for parking facility operating and capital obligations; however, surplus revenue may be used to support a transportation management district.

The table below shows the different FY08 funding sources in the four Transportation Management Districts and one Transportation Planning and Policy Area (in Wheaton).

**FY08 FUNDING FOR TRANSPORTATION DEMAND MANAGEMENT IN URBAN CENTERS**

	<b>North Bethesda</b>	<b>Bethesda</b>	<b>Friendship Heights</b>	<b>Silver Spring</b>	<b>Wheaton</b>
<b>Parking Revenue</b>	✓	✓			✓
<b>TMD Fees</b>	✓	✓	✓		
<b>Mass Transit Fund</b>			✓	✓	✓

## TRANSPORTATION DEMAND MANAGEMENT IN OTHER COMMUNITIES

Other communities implement a variety of transportation demand management strategies. Highlights from these strategies and observations about their applicability to Montgomery County are summarized below.

*Dedicated Funding for Transit:* Most large transit systems in the country are funded in part by revenue from a dedicated source. Examples of dedicated revenue are sales taxes, automobile fees, and toll revenue. Montgomery County would need State approval to establish any of these types of revenue as a dedicated funding source for transit.

Montgomery County is already authorized to implement other transit funding strategies used elsewhere. For example, the County could establish "transportation improvement districts" (a type of special taxing district) to raise revenue for transit system improvements. The County could also impose an excise tax on non-residential parking spaces, or it could raise public parking rates to support transit programs.

*Transportation Network Design:* Transportation network design may also promote efficient commuting practices. Examples include:

- Locating public parking facilities at the periphery of a central business district to intercept vehicles before they enter the congested district center.
- Installing traffic signaling systems that give precedence to transit vehicles at signal-controlled intersections.
- Building dedicated rights-of-way or roadway lanes used by frequent, high-capacity public commuter buses.

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*Economic Incentives:* Economic incentives are a common tool to entice commuters to switch to transit or other alternative modes. Currently, the County reimburses some employer-provided transit subsidies. Other communities have developed different incentives to encourage commuting by alternative modes. For example:

- In Denver, Colorado, transit systems sell discounted passes for use by all workers in an organization. These programs offer those employees who do not need to drive every day an incentive to ride transit occasionally.
- The state of California requires many employers that provide parking subsidies to offer a cash allowance as an alternative to the parking subsidy.
- Redmond, Washington, has a pilot program that calculates an initial baseline number of commuter trips for a business, and then pays a business \$300 annually for each trip it eliminates below the initial baseline.

*Driving Disincentives:* Several communities have adopted strategies to make driving alone less attractive than other commuting options. Examples of driving disincentive practices include:

- Reducing minimum parking requirements for urban areas served by transit. Alternatively, some communities set maximum limits – by site or by district - on the amount of parking permitted.
- Constraining the parking supply or raising parking rates.
- Adjusting transportation-related charges by time of day or by location (a practice known as “congestion pricing”). For example, London charges drivers a fee to enter the city center.

## **OLO RECOMMENDATIONS**

OLO offers four recommendations for Council action to improve the consistency of the County’s policies and practices related to transportation demand management.

### **1. Establish parking policies that are consistent with the County’s transportation demand management goals.**

The Council should review and amend current parking policies to better align them with the County’s transportation demand management goals established in approved master plans and the Growth Policy. The Council should consider revising Zoning Ordinance parking requirements and establishing criteria for determining the supply and pricing of County-owned parking spaces.

### **2. Ask the Executive and the Planning Board to report annually on commuting goals.**

The Council is the sole entity with authority to align land use and transportation policies to achieve complementary objectives. The Council should ask the County Executive and the Planning Board to report annually on progress made toward achieving master plan commuting goals. Based on this input, the Council should determine what changes, if any, should be made to transportation or land use policies and programs.

### **3. Ask the Executive to evaluate transportation demand management practices used in other communities.**

The County has implemented a broad series of measures to promote alternative commuting modes; nonetheless, some practices from other jurisdictions merit further evaluation to assess their viability in Montgomery County. The Council should ask the County Executive to evaluate transportation demand management practices that could supplement the current array of County programs.

### **4. Discuss approaches for creating and funding a sustainable alternative commuting infrastructure.**

If the County’s transportation demand management programs are successful, the increased demand created by a large scale shift in commuting practices could strain the County’s transit, bicycle, and pedestrian networks. The Council should discuss its long-term vision for building and funding additional capacity to accommodate workers who no longer commute by single-occupant vehicle. The Council should assess whether it expects to use existing revenue sources to build future improvements or whether it intends to pursue new funding resources for major new initiatives.

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## **CHAPTER I: AUTHORITY, SCOPE, AND ORGANIZATION OF REPORT**

### **A. Authority**

Council Resolution 16-673, *Fiscal Year 2009 Work Program of the Office of Legislative Oversight*, adopted July 29, 2008.

### **B. Purpose and Scope of Report**

Transportation demand management programs in urban centers are designed to change travel behavior by providing convenient and affordable alternatives to the single-occupant vehicle. The objectives of these programs are to reduce traffic congestion, decrease energy consumption, and improve air quality. Montgomery County offers a collection of transportation demand management programs that focus on urban center commuters.

The County Council directed OLO to prepare a report that describes the implementation, funding, and governance of transportation demand management strategies in Montgomery County and in other jurisdictions. Specifically, the Council asked OLO to:

- Describe transportation demand management practices in the County's urban centers, including programs, governance structure, and financing;
- Provide case studies from other jurisdictions on alternative urban transportation demand management approaches; and
- Identify transportation demand management practices, governing structures, and financing techniques employed in other jurisdictions that could be considered for use in Montgomery County.

### **C. Organization of Report**

**Chapter II, Transportation Demand Management Concepts**, describes concepts relating to transportation demand management.

**Chapter III, Transportation Demand Management Governance and Implementation in Montgomery County**, describes the County's approach to transportation demand management.

**Chapter IV, County Parking Policies and Commuter Choice**, describes County policies and programs relating to parking in urban centers.

**Chapter V, Transit and Transportation Demand Management Funding**, presents information on the funding of transit and transportation demand management programs.

**Chapter VI, Transportation Demand Management in Other Communities**, identifies alternative transportation demand management practices employed in other communities and discusses the potential applicability of these practices to the County.

**Chapter VII** presents a summary of the Office of Legislative Oversight's **Findings**.

**Chapter VIII** presents the Office of Legislative Oversight's **Recommendations**.

**Chapter IX** presents **Agency Comments** received on a final draft of this report.

#### **D. Methodology**

Office of Legislative Oversight (OLO) staff members Aron Trombka and Jennifer Renkema conducted this study. OLO gathered information through document reviews, data analysis, and interviews with staff from the Department of Transportation (DOT) and the Department of Planning. OLO also met with managers of transportation management organizations and attended meetings of transportation management district advisory committees. OLO conducted internet research on transportation demand management programs around the country and abroad and made e-mail contact with program managers to learn more about specific initiatives. A primary source for much of the content of this report was the website of the Victoria Transport Policy Institute's online Transportation Demand Management Encyclopedia (<http://www.vtpi.org/tdm/index.php#incentives>).

#### **E. Acknowledgements**

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## **CHAPTER II: TRANSPORTATION DEMAND MANAGEMENT CONCEPTS**

This chapter introduces the reader to some of the basic concepts that influence the design and implementation of transportation demand management programs. This chapter includes two sections.

Section A, **Definition of Transportation Demand Management**, defines the concept and objectives of transportation demand management; and

Section B, **Factors that Influence Commuter Choices**, presents an overview of the different factors that influence commuter travel choices.

### **A. Definition of Transportation Demand Management**

The phrase transportation demand management (TDM) refers to a set of strategies that increase the efficiency of a region's transportation resources including roadways, transit lines, bikeways, pedestrian connections, and parking facilities. More specifically, TDM strategies seek to maximize the number of travelers that a transportation network can accommodate in a cost effective, timely, and convenient fashion. In jurisdictions such as Montgomery County, where communities are transitioning from suburban to urban densities, a central purpose of TDM is to change travel behavior by promoting viable alternatives to commuting by single-occupant automobile.

The Victoria Transport Policy Institute describes "transportation demand management" as follows:

"Transportation Demand Management refers to various strategies that change travel behavior (how, when and where people travel) in order to increase transport system efficiency and achieve specific planning objectives. TDM is increasingly used to address a variety of problems.

... Many factors affect people's transport decisions including the relative convenience and safety of travel modes (such as whether streets have sidewalks and bikepaths, and the quality of transit services available), prices (transit fares and the price of parking at destinations); and land use factors (such as whether or not schools, parks and shops are located close to residential neighborhoods).

... Transportation Demand Management strategies influence these factors to encourage more efficient travel patterns, such as shifts from peak to off-peak periods, from automobile to alternative modes, and from dispersed to closer destinations."<sup>1</sup>

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<sup>1</sup> Victoria Transport Policy Institute, Online TDM Encyclopedia, <http://www.vtpi.org/index.php>, July 2008

The Montgomery County Code, Chapter 42A, defines transportation demand management as:

“any method of reducing demand for road capacity during a peak period, including an alternative work hours program, carpools, vanpools, subsidized transit pass, preferential parking, improved bicycle and pedestrian access and safety, or peak period parking charge.”<sup>2</sup>

Of the various TDM strategies that influence commuting decisions, this OLO report focuses on strategies relating to:

- The funding of transit and other alternative commuting modes;
- Incentives to encourage the use of alternative commuting modes;
- Disincentives to commuting in a single-occupant automobile; and
- Land use and transportation network designs that promote efficient commuting patterns.

## **B. Factors that Influence Commuter Choices**

If the goal of TDM strategies is to change travel behavior, it is helpful to identify the factors that commuters take into account when they decide how to travel to work. To address this question, OLO interviewed transportation management professionals in Montgomery County and reviewed academic and professional literature. OLO’s literature review relied, in particular, on work published by the U.S. General Accountability Office and the Victoria Transport Policy Institute.

As detailed below, most of the factors that influence commuter choices affect one of the following three attributes:

- **Cost** – the relative expense of alternative commuting modes;
- **Time** – the time it takes to commute by one mode compared to another; and
- **Convenience** – the ease, comfort, and reliability of alternative commuting modes.

In its interviews with transportation demand management professionals and its review of the literature, OLO found recurring descriptions of these three factors as having the greatest impact on commuter choices. As an illustrative example, the Transportation Research Board of the National Research Council studied factors that influence individuals’ travel decisions. As part of the study, the researchers conducted a survey of residents in metropolitan areas with a rail transit system. Consistent with the input OLO received from its interviews, the Transportation Research Board study found that a sizable majority of survey respondents sought “reliable transportation at low cost, ... didn’t want to spend any additional time commuting, nor ... to be dependent on someone else for their transportation.”<sup>3</sup>

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<sup>2</sup> MCC §42A-21.

<sup>3</sup> Transportation Research Board, *Understanding How Individuals Make Travel and Location Decisions: Implications for Public Transportation* (TCRP REPORT 123), 2008

Examining these factors more closely, OLO found there are numerous conditions that impact the cost, time, and convenience of commuting. These conditions fall into three general categories: community conditions, individual circumstances, and external factors.

## **1. Community Conditions**

The physical development of a community influences commuting choice. This section identifies five community factors that may contribute to an individual's decision to drive alone to work or to use an alternative mode of transportation.

*Land Use Patterns:* Land use patterns affect commuting options. The relative locations and density of jobs and housing influence whether alternatives to the single-occupant automobile are viable. Transit and carpooling become more feasible where geographically concentrated patterns of housing and/or jobs exist. This occurs because concentrating land uses enables the efficient operation of a fleet of shared vehicles to collect and transport commuters to their destinations. Moreover, in mixed-use urban centers, walking to work also becomes an option for some commuters.

*Transit Network:* To be a viable commuting option, a transit network must be capable of transporting a large number of people and must connect areas where people live with areas where they work. In addition, the frequency of service is an important factor in determining how many people use transit to commute to jobs. Moreover, for commuters to consider transit, the system must be reliable, convenient, and cost competitive.

*Roadway Network / Traffic Congestion:* The roadway network influences a commuter's travel behavior. A roadway network with excess capacity relative to demand easily accommodates all forms of automobile commuting, including single-occupant vehicles. In contrast, a roadway network with excess traffic congestion due to capacity constraints may prompt some commuters to consider alternative modes of transportation. Building roadway features such as dedicated bus lanes, high-occupancy vehicle lanes, and bicycle lanes supports alternatives to driving alone.

*Parking Availability and Cost:* The availability and cost of parking plays a significant role in shaping commuting decisions. Plentiful low-cost parking serves as an incentive to drive alone; limited or high-cost parking provides an incentive to commute by alternative modes. Moreover, where parking is at a premium, the presence of reserved, preferred, or discounted spaces for carpools and vanpools may prompt some commuters to share the ride to work.

*Bicycle / Pedestrian Network:* The existence of bikeways connecting residential areas to urban employment centers offers a commuting alternative for some people. Within an urban center, an extensive and safe pedestrian network is necessary for people to feel comfortable walking from their transit stop to their place of employment. In mixed-use urban centers, pedestrian connections allow residents to walk to work.

Table 2-1 summarizes the community conditions that support either driving alone or alternative modes of commuting.

**Table 2-1: Summary of Community Conditions that Support Single-Occupant Auto and Alternative Commuting Modes**

	Conditions that Support Single-Occupant Auto Commuting	Conditions that Support Alternative Commuting Modes
<b>Land Use Patterns</b>	<ul style="list-style-type: none"> <li>Scattered residential and employment centers</li> <li>Limited housing in or near urban centers</li> </ul>	<ul style="list-style-type: none"> <li>Concentrated residential and employment centers</li> <li>Housing within or in walking / biking distance to urban centers</li> </ul>
<b>Transit Network</b>	<ul style="list-style-type: none"> <li>Limited transit between major employment and residential centers</li> <li>Infrequent transit departures</li> </ul>	<ul style="list-style-type: none"> <li>Expansive regional transit network that reaches major employment and residential centers</li> <li>Frequent transit departures</li> </ul>
<b>Roadway Network / Traffic Congestion</b>	<ul style="list-style-type: none"> <li>Road network that does not accommodate transit, high-occupancy vehicles, or bicyclists</li> <li>Low levels of traffic congestion</li> </ul>	<ul style="list-style-type: none"> <li>Road network that accommodates and supports transit, high-occupancy vehicles, and bicyclists</li> <li>High levels of traffic congestion</li> </ul>
<b>Parking Availability</b>	<ul style="list-style-type: none"> <li>Parking supply that exceeds demand</li> </ul>	<ul style="list-style-type: none"> <li>Constrained parking supply</li> <li>Reserved, preferred, or discounted parking for carpools and vanpools</li> </ul>
<b>Bicycle / Pedestrian Network</b>	<ul style="list-style-type: none"> <li>Limited bikeways and walkways to and within urban centers</li> </ul>	<ul style="list-style-type: none"> <li>Extensive bikeways and walkways to and within urban centers</li> </ul>

## 2. Individual Circumstances

Besides the community conditions described above, a commuter's individual circumstances will affect travel mode decisions. The affects of these circumstances are different for each person.

**Commuting Costs:** The relative costs of commuting alternatives influence personal decisions about how to travel to work. For example, the cost of driving alone not only depends on fuel prices (see page 9), but is also a function of other factors such as the type of vehicle driven, the cost of parking, and the availability of transit subsidies. A commuter who drives a relatively fuel efficient car may have significantly lower commuting costs than someone who drives a gas guzzler. Whether a commuter's employer offers free (or below market rate) parking also is a significant factor in the overall cost of driving. In addition, whether an employer offers transit subsidies also can affect the cost competitiveness of transit relative to driving alone.

**Commuting Time:** The length of time it takes to travel door to door influences commuting decisions. In addition to community factors such as the level of roadway congestion and the quality of the transit network, personal circumstances affect travel time, which in turn affects



commuting choices. For example, an employee who lives near his/her workplace or near a transit line has more ways to reach work in an acceptable amount of time than an employee who lives far away from work or transit. An employer that permits a flexible work schedule may reduce employee commuting during peak hours. In addition, an organization that allows telework reduces an employee's commute time to zero on days when s/he works from home.

*Commuting Convenience:* Driving alone and transit offer different types of conveniences and inconveniences for commuters. For example, a driver has an automobile at his/her immediate disposal for running errands on the way to work, during lunch time, or on the way home. In contrast, a transit rider may be able to perform other tasks during his/her commute. At times, a driver must contend with unexpected traffic congestion, accidents, and construction. On the other hand, some transit riders regularly encounter crowded buses or trains. During inclement weather, a driver encounters more difficult driving conditions; whereas a transit rider encounters less comfortable waiting conditions. Different individuals will weigh the value of these conveniences and inconveniences differently.

*Personal Preferences / Limitations:* Personal preferences or individual limitations also influence commuting choices. Environmental concerns may motivate some people to choose alternative commuting modes. Others may choose biking or walking to combine exercise with their commute. In contrast, some people with mobility limitations may consider driving alone the only feasible commuting option.

Table 2-2 on the following page summarizes the individual circumstances that support either driving alone or alternative modes of commuting.

**Table 2-2: Summary of Individual Circumstances that Support Single-Occupant Auto and Alternative Commuting Modes**

	Conditions that Support Single-Occupant Auto Commuting	Conditions that Support Alternative Commuting Modes
<b>Commuting Costs</b>	<ul style="list-style-type: none"> <li>Fuel efficient personnel vehicles</li> <li>Free or below market rate parking</li> </ul>	<ul style="list-style-type: none"> <li>Fuel inefficient personnel vehicles</li> <li>High cost parking</li> <li>Transit subsidies</li> </ul>
<b>Commuting Time</b>	<ul style="list-style-type: none"> <li>Employees who live distant from both work and transit</li> </ul>	<ul style="list-style-type: none"> <li>Employees who live close to either work or transit lines</li> <li>Organizations which permit flexible work schedules and telework</li> </ul>
<b>Commuting Convenience</b>	<ul style="list-style-type: none"> <li>Desire to use automobile for running errands</li> <li>Personal sense that driving is a reliable, predictable, and comfortable commuting option</li> </ul>	<ul style="list-style-type: none"> <li>Desire to perform other tasks during commute</li> <li>Personal sense that alternative modes are reliable, predictable, and comfortable commuting options</li> </ul>
<b>Personnel Preferences / Limitations</b>	<ul style="list-style-type: none"> <li>A physical condition that makes alternative modes difficult</li> </ul>	<ul style="list-style-type: none"> <li>A desire to conserve natural resources, reduce pollution</li> <li>A desire to get exercise while commuting</li> </ul>

### 3. External Factors

Several conditions beyond the direct control of the County Government or County residents influence commuting decisions. This section presents three examples of external influences that affect commuting choices.

**Fuel Costs:** Rising fuel prices make transit more cost competitive with driving alone and increase the attractiveness of alternative commuting means such as carpooling and bicycling.

**Housing Market Conditions:** When housing costs spiked sharply in recent years, many people who work in the County chose to live in distant communities with more affordable housing. These choices lengthened people's commutes, put more traffic on the roadway network, and limited the feasibility of alternatives to driving alone.

**Employer Work Schedule Policies:** Employers that permit employees to work flexible schedules or to telework may help reduce the number of peak hour commuting trips.

### **CHAPTER III: TRANSPORTATION DEMAND MANAGEMENT GOVERNANCE AND IMPLEMENTATION IN MONTGOMERY COUNTY**

This chapter describes Montgomery County's approach to transportation demand management (TDM) and includes the following three sections:

Section A, **Governance Structure**, describes transportation demand management governance and organizational structures in Montgomery County;

Section B, **Special TDM Areas in Montgomery County**, describes how the County has focused TDM requirements and resources in urban centers; and

Section C, **County Transportation Demand Management Policies and Programs**, presents the County's strategies for implementing transportation demand management.

#### **A. Governance Structure**

Responsibility for transportation demand management in Montgomery County is decentralized and shared among multiple County and non-County entities. As detailed below, the County Council, County Executive, Department of Transportation, and the Maryland-National Capital Park and Planning Commission each exercise authority that shapes the County's transportation demand management strategies. In addition, Montgomery County is located in a metropolitan area where transit services such as bus and rail cross jurisdictional lines. The County must work with the States of Maryland and Virginia, District of Columbia, and the Washington Metropolitan Area Transit Authority (WMATA), and the Metropolitan Washington Council of Governments to affect County and regional transit goals. The County is also influenced by Federal policies that influence transportation demand management.

##### **1. County Entities**

###### **a. County Council and County Executive**

County Council: The County Council exercises the authority to establish County policies that impact transportation demand management, such as land use patterns; the transit, roadway and bicycle networks; and parking availability. Specifically, the Council:

- Approves the County's annual operating budget and capital improvements program, which fund transportation demand management programs and transit operations and facilities (e.g., bus facilities, bikeways, and sidewalks);
- Has final approval authority for master plans and the biannual Growth Policy;
- Enacts County law including the chapters of the County Code that directly impact transportation demand management: Chapter 42A, Ridesharing and Transportation Management; Chapter 59, the County Zoning Ordinance, and Chapter 60 Parking Lot Districts; and
- Sets parking rates for County parking facilities by annual resolution.

Additionally, under the County Code, the Council has the authority to create transportation management districts (described beginning on page 13) and confirm members of the Friendship Heights and Silver Spring Transportation Management District Advisory Committees. The Council also advocates at the State level for transportation funding and coordinates with other local governments to set regional transportation goals.

County Executive: The County Executive prepares and recommends an annual operating budget and biannual capital improvements program, including funding for transportation services and facilities. The County Executive also has legal authority to establish “share-a-ride districts” (see page 28) and nominate members to the Friendship Heights and Silver Spring Transportation Management District Advisory Committee (see pages 16 and 17).

## **b. Department of Transportation**

Four DOT organizational units manage County transportation facilities and services that shape the County’s transportation demand management strategies: the Office of the Director, the Division of Transit Services, the Division of Parking Management, and the Division of Traffic Engineering and Operations. The roles of these units are briefly described here, and more details about the specific programs they administer are found later in this chapter and in Chapter IV.

Office of the Director: The Office of the DOT Director oversees the implementation of transportation policies for the County Government. The Director’s Office sets priorities for all DOT programs including transit, commuter services, and parking management activities, and is also responsible for providing general program oversight.

In addition, the Director’s Special Assistant for Metro Affairs serves as the liaison between the County Government and outside agencies including the Washington Metropolitan Area Transit Authority (WMATA), the Maryland Transit Administration (MTA), and other local jurisdictions. For example, the Special Assistant attends WMATA board meetings and meets regularly with representatives from other jurisdictions to review the WMATA budget, programs, and policies. The Special Assistant also advocates for State support of transit services.

Division of Transit Services: The mission of the Division of Transit Services is to “provide an effective mix of public transportation services in Montgomery County.” The Division operates the County’s Ride On bus system, coordinates special transit services for seniors and persons with disabilities; regulates taxi services; provides commuter services; and oversees transportation management districts. More specifically, the Commuter Services Section manages County programs and services to decrease single-occupancy vehicle trips during peak travel hours by encouraging commuters to use alternate modes of transportation. The County’s array of commuter services is described in detail beginning on page 32. The Division also develops the County’s Transit Strategic Plan.

Division of Parking Management: This Division maintains and operates County parking facilities in the parking lot districts and determines the mix of short- and long-term parking. The Division’s responsibilities are described in Chapter IV.

Division of Traffic Engineering and Operations: This Division maintains bikeways, sidewalks, crosswalks, and lighting and installs pedestrian count-down signals.

### **c. Maryland-National Capital Park and Planning Commission**

Montgomery County Planning Board: The Planning Board develops and recommends master plans and a biannual Growth Policy to the County Council. These documents influence transportation demand, roadway network capacity, and traffic congestion by shaping the type, location, density, and sequencing of development. Based on master plan and Growth Policy guidelines adopted by the Council, the Planning Board may require developers to implement traffic mitigation measures to reduce development impact on traffic congestion and to reduce single-occupancy vehicle trips.

Montgomery County Department of Planning: The Planning Department prepares draft master plans and Growth Policies for the Planning Board. The Planning Department's Division of Transportation Planning analyzes the impact of traffic generated by new development on the County's transportation network. The Division works with State and County transportation agencies and with developers to design and implement transportation elements in the County's master plans. In addition, the Division participates in drafting and enforcing traffic mitigation measures required by the Planning Board as part of the development approval process.

## **2. Non-County Entities**

State of Maryland: The State of Maryland influences transportation demand management in Montgomery County in several ways. Specifically the State:

- Operates and funds Maryland Transit Administration (MTA) Commuter Buses and the MARC train system. The County has only an indirect role in determining levels of service or long-term planning for MARC. County responsibility related to MARC service consists only of facility and parking maintenance at some stations.
- Provides funding for Metrobus and Metrorail service to Montgomery County.
- Provides financial aid to the County's Ride On bus service. The amount of State aid for Ride On varies from year to year and is subject to appropriation by the State General Assembly.
- Provides annual financial assistance to County ride-sharing programs.
- Controls right-of-way use, lane configurations, traffic signal settings, and other factors that influence transportation demand management on State highways. This is relevant for this study since most major roadways in County urban centers are State highways.
- Limits the County's revenue collection authority. For example, the State, and not the County, retains the authority to levy a sales tax on gasoline, impose roadway tolls, or collect fees on the licensing and registration of motor vehicles.

Federal Government: Several federal government policies and programs impact transportation demand management in Montgomery County. For example, the Federal Government provides some funding for WMATA services. In addition, Federal tax laws stipulate that employer-provided transit subsidies that exceed \$115 per month are taxable income.<sup>1</sup>

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<sup>1</sup> The Internal Revenue Service will increase the non-taxable transit benefit limit to \$120 per month in January 2009.

*The Washington Metropolitan Area Transit Administration (WMATA)*: WMATA operates the regional Metrobus and Metrorail systems which serve Montgomery County. The WMATA board includes two voting representatives from each jurisdiction: Maryland, Virginia, and the District of Columbia. The governor appoints Maryland's two voting members, one to represent Montgomery County and the other to represent Prince George's County. Montgomery County also has an alternate member who is appointed by the County Executive. The alternate member votes in committee and may vote with the full board when the permanent member is unavailable. Funding decisions for Metro that impact Montgomery County are primarily made by the State.

*Metropolitan Washington Council of Governments (COG)*: COG provides regional coordination for transportation demand management efforts. COG's efforts include employer outreach, marketing, maintaining a ridesharing database for use by regional governments (including the County), and offering the Guaranteed Ride Home (described on page 33). COG also provides grant funding for the County's employer outreach activities related to transportation demand management.

## **B. Special TDM Areas in Montgomery County**

The County provides transportation demand management and commuter services throughout the County. However, County policies and practices focus commuter services resources on certain "urban centers." For the purposes of this report, the term "urban centers" refers to areas of the County with high concentrations of employment that are well served by transit. Specifically, this report focuses on the four active transportation management districts and the one transportation planning and policy area in the County. As this report addresses TDM strategies implemented by the County Government, the report does not discuss Federal Government employment centers or urban centers located within municipalities.

### **1. Transportation Management Districts**

#### **a. Legal Framework**

County Code Chapter 42A, Ridesharing and Transportation Management, establishes the Council's authority to establish Transportation Management Districts (TMDs) in certain areas of the County. Specifically, the law:

- Explains the purposes of transportation demand management;
- Stipulates what types of areas may be designated as TMDs;
- Describes the role of DOT and the Planning Board in managing TMDs;
- Requires developers and some businesses within TMDs to implement plans to reduce traffic;
- Requires DOT to monitor and report on transportation demand management outcomes in the TMD; and
- Authorizes a special TMD fee that may be charged to developers and property owners within the TMD.

*Purposes of Transportation Demand Management:* The County Code describes the relationship between transportation demand management and County land use and development objectives. Specifically, the law states that the County desires to “focus new development in high transit-service areas” but that “limited transportation infrastructure, traffic congestion, pedestrian access, and safety issues impede the County’s land use and economic development objectives.”<sup>2</sup> The law identifies three purposes of transportation demand management. These are to:

- “Provide sufficient transportation capacity to achieve County land use objectives and permit further economic development;
- Reduce the demand for road capacity, and promote traffic safety and pedestrian access; and
- Help reduce vehicular emissions, energy consumption, and noise levels.”<sup>3</sup>

According to the Code, transportation demand management will result in “improved traffic levels and air quality, and a reduction in ambient noise levels [that] will help create attractive and convenient places to live, work, visit, and conduct business.”<sup>4</sup>

The Code also stipulates that transportation demand management measures should be conducted:

- In conjunction with transportation facility review, capital improvement projects, and parking and traffic control measures;<sup>5</sup>
- With cooperation from government, developers, employers, property owners, and the public;<sup>6</sup> and
- Consistent with commuting goals in the Growth Policy.<sup>7</sup>

*Areas that may be Designated as Transportation Management Districts:* The Code authorizes the Council to establish TMDs in:

- Metro station policy areas and adjacent areas served by the same transportation network; and
- An area where transportation review applies under the Growth Policy.<sup>8</sup>

*Governance of TMDs:* The Code authorizes both the Department of Transportation and the Planning Board to implement transportation demand management measures in TMDs, as shown in Table 3-1 on the next page. In addition, the Code allows the Executive and the Council to establish transportation management district advisory committees in each TMD.<sup>9</sup> The law also allows DOT to enter into sole source contracts with a transportation management organization to carry out transportation demand management programs in a TMD.<sup>10</sup>

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<sup>2</sup> MCC §42A-22 (a) and (b).

<sup>3</sup> MCC §42A-22 (c).

<sup>4</sup> MCC §42A-22 (d).

<sup>5</sup> MCC §42A-22 (c).

<sup>6</sup> MCC §42A-22 (e).

<sup>7</sup> MCC §42A-22 (f).

<sup>8</sup> MCC §42A-23.

<sup>9</sup> MCC §42A-23 (e).

<sup>10</sup> MCC §42A-23 (c).

**Table 3-1: Authority of DOT and the Planning Board in TMDs**

<b>Department of Transportation</b>
<ul style="list-style-type: none"> <li>• Regulate or limit parking</li> <li>• Monitor and assess traffic patterns and pedestrian access and safety</li> <li>• Adopt traffic and parking control measures</li> <li>• Provide approved transportation-related capital projects</li> <li>• Promote or implement transit and ridesharing incentives</li> <li>• Promote regional cooperation between the County and other government agencies</li> <li>• Create cooperative County-private sector programs</li> <li>• Conduct studies to determine the effectiveness of efforts</li> <li>• Impose transportation demand management measures as conditions of the Planning Board's approval of development</li> </ul>
<b>Planning Board</b>
<ul style="list-style-type: none"> <li>• Impose transportation demand management measures as conditions of development approval</li> </ul>

Source: Montgomery County Code, Chapter §42A-23

**Outcome Monitoring:** The Code requires DOT to monitor and report on the results of traffic mitigation measures in TMDs through an annual commuter survey and a biennial report.

**Annual Commuter Survey.** DOT must conduct an annual commuter survey in TMDs to gather data on employee commuting patterns and monitor progress toward achieving Growth Policy commuting goals. The Code requires employers to make a “good faith effort” to achieve an 80 percent completion rate.<sup>11</sup>

**Biennial Executive Report.** DOT must submit a biennial report to TMD Advisory Committees, the Planning Board, and the County Council on:

- Employee commuting patterns;
- Auto occupancy rates;
- Level of service measurements for each intersection in the policy area and selected critical intersections outside the area;
- Parking supply and demand;
- Status of road or intersection improvement, signal automation, improved bicycle and pedestrian access and safety, and other traffic modification in or near the policy area;
- Transit use and availability;
- Carpool and vanpool use; and
- The source and use of any funds received for the TMD.<sup>12</sup>

<sup>11</sup> MCC §42A-26.

<sup>12</sup> MCC §42A-27.



Funding TMDs: The Code authorizes the Council to establish an annual fee to be charged to developers and owners of optional method projects in TMDs. Fee revenue must be used for TMD administration or program implementation in the district where it was collected. In addition, the County funds TMD activities with General Fund and Parking Lot District Fund revenue. (See Chapter V for a complete description of funding for TMDs.)

#### **b. Established Transportation Management Districts**

The Council has established five transportation management districts: North Bethesda, Downtown Bethesda, Friendship Heights, Downtown Silver Spring, and Shady Grove. Although the Council established the Shady Grove district in 2006,<sup>13</sup> it remains unfunded and inactive.

North Bethesda TMD: The Council established the North Bethesda TMD in 1995.<sup>14</sup> This TMD includes the Metro Station Policy Areas of Grosvenor, Twinbrook, and White Flint and the surrounding areas of Executive Boulevard, Rock Spring Park, and Montgomery Mall. (See map page 18.) DOT contracts with Transportation Action Partnership (TAP) to manage the North Bethesda TMD. The North Bethesda TMD has an advisory committee with 12-18 voting members and three non-voting members who are appointed by the TAP Board of Directors. The North Bethesda TMD receives funding from a TMD fee and parking fees from County-operated parking in the district.

Bethesda TMD: In 1998, the Council established a transportation management district within the Bethesda Central Business District.<sup>15</sup> (See map page 19.) DOT contracts with the Bethesda Urban Partnership (BUP) to manage the TMD. The Bethesda TMD has an advisory committee with 11 voting members and five non-voting members appointed by the BUP Board of Directors. The Bethesda TMD receives funding from a TMD fee and revenue transferred from the Bethesda Parking Lot District Fund.

Friendship Heights TMD: The Council established a transportation management district in the Friendship Heights Sector Plan area in 1999.<sup>16</sup> (See map page 20.) The DOT Division of Transit Services manages the TMD. The Friendship Heights TMD has an advisory committee with 14 voting members and eight non-voting members who are nominated by the County Executive and confirmed by the County Council. The Friendship Heights TMD receives funding from a TMD fee and the County's Mass Transit Fund.

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<sup>13</sup> Resolution 15-1432

<sup>14</sup> Resolution 13-319

<sup>15</sup> Resolution 14-56

<sup>16</sup> Resolution 14-325

*Silver Spring TMD*: In 1987, the Council established a transportation management district in the Silver Spring Central Business District.<sup>17</sup> This district was reauthorized in 2002 to update to reflect changes to County Code Chapter 42A, Ridesharing and Transportation Management.<sup>18</sup> (See map page 21.) The DOT Division of Transit Services manages the TMD. The Downtown Silver Spring TMD has an advisory committee with 12 voting members and four non-voting members who are nominated by the County Executive and confirmed by the County Council. The TMD receives funding from the County's Mass Transit Fund. Although authorized, no TMD fees have been collected in Silver Spring because no developments required to pay the fee have been completed. DOT expects that some fees will be collected in FY09. In FY09, the Silver Spring TMD is receiving a transfer of about \$200,000 from the Silver Spring Parking Lot District Fund.

## **2. Wheaton Transportation Planning and Policy Area**

DOT designated the Wheaton CBD as a transportation planning and policy area (TPPA) in 1993. (See map page 22). DOT considers the TPPA as a precursor to a potential TMD in the Wheaton CBD. Initiatives in the TPPA are similar to those in a TMD, but they are not mandated by law. Within the TPPA, the DOT Division of Transit Services:

- Provides technical and marketing support to employers;
- Markets transit subsidies and programs for employees;
- Encourages employers to voluntarily submit traffic mitigation plans;
- Consults with the Wheaton Urban District, the Mid-County Regional Services Center and Citizens Advisory Board, and Wheaton-Kensington Chamber of Commerce as advisory bodies for TPPA activities;
- Distributes, tabulates, and analyzes annual commuter surveys; and
- Produces periodic reports which include the status of transportation projects and services, parking supply and utilization, traffic counts at key intersections, and employee commute characteristics.

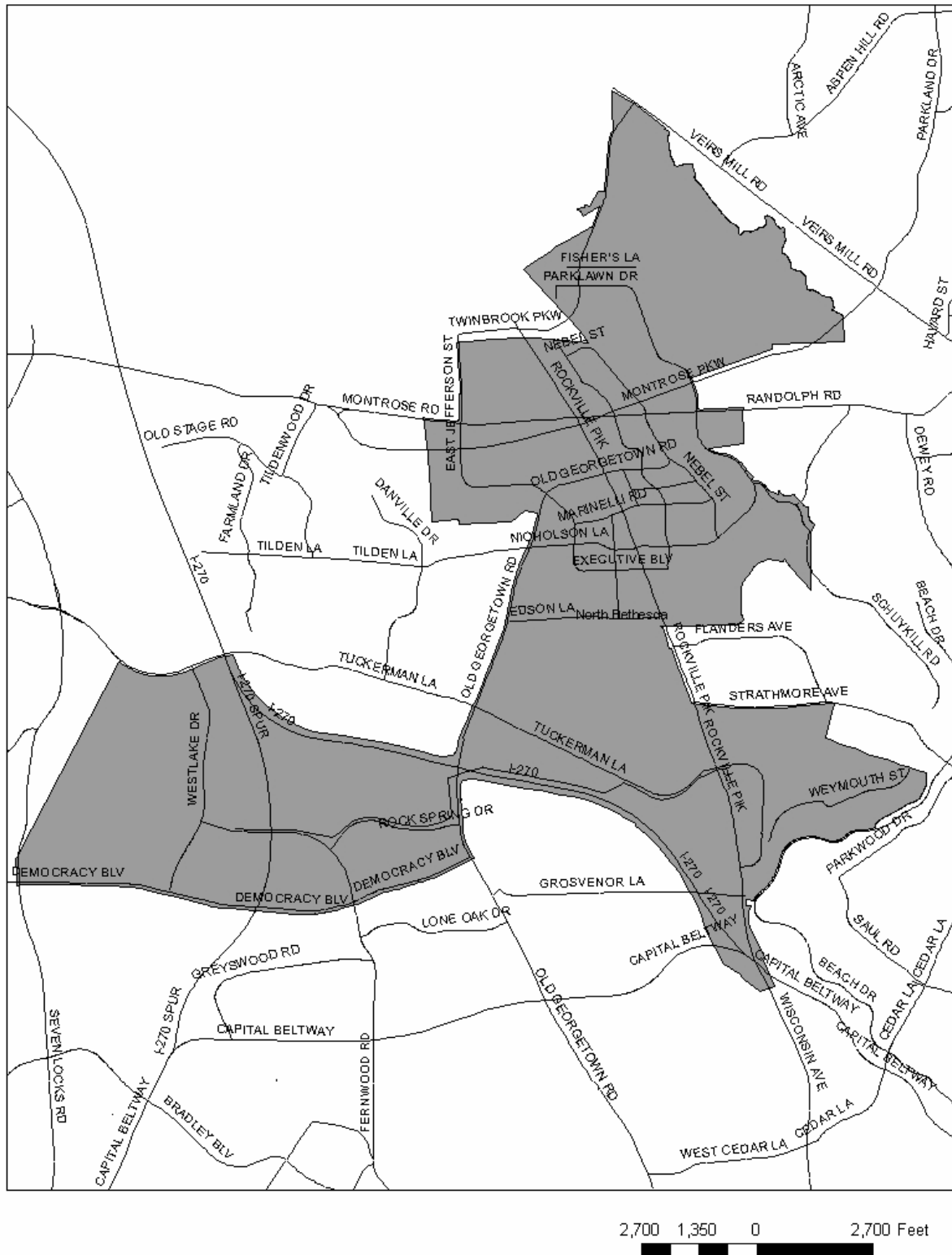
Transportation demand management activities in the Wheaton TPPA are funded with revenue from the County's Mass Transit Fund and a transfer from the Wheaton Parking Lot District Fund.

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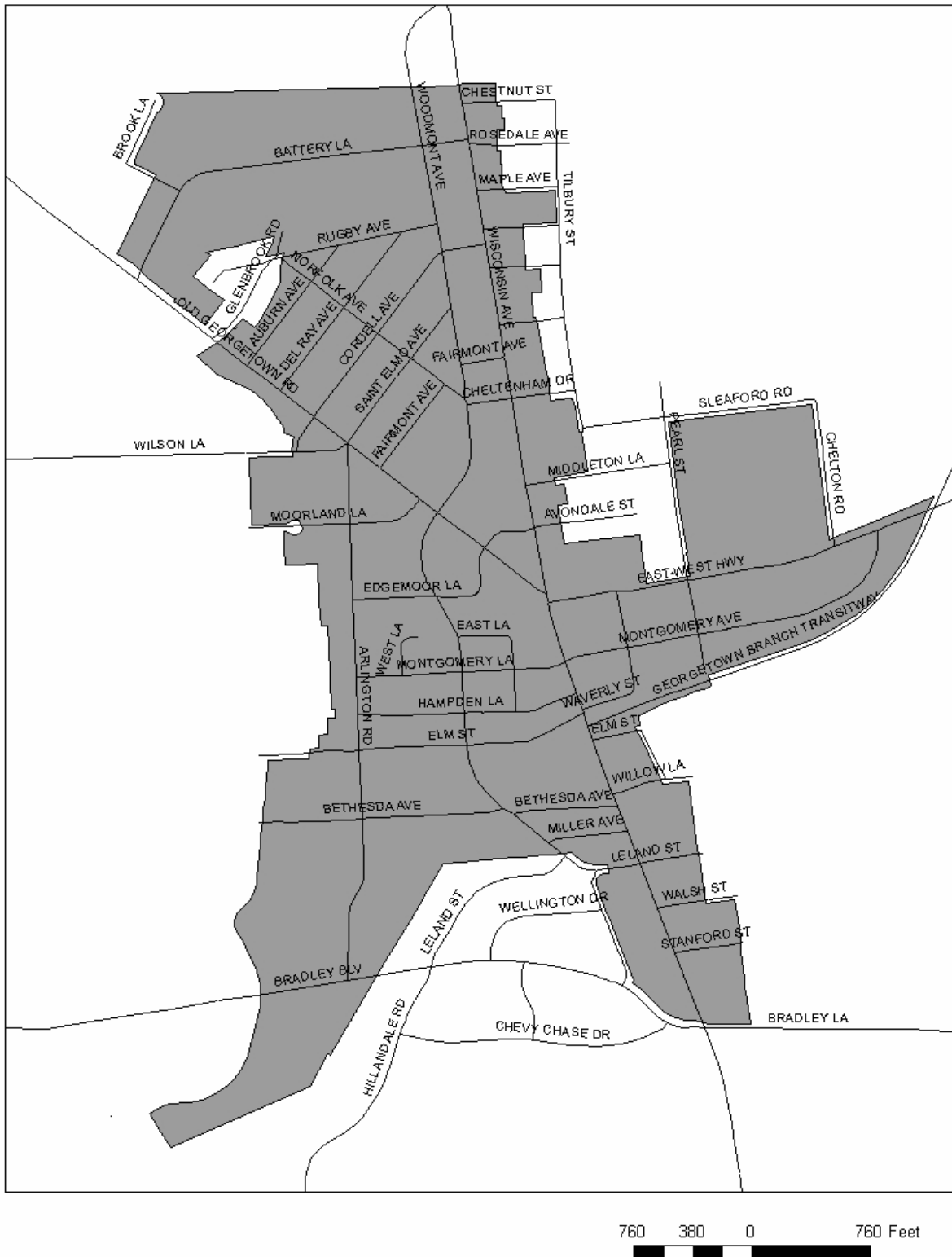
<sup>17</sup> November 10, 1987. Montgomery County Council Legislative Session Minutes. Subject: Bill No. 24-87. *Transportation System Management—Silver Spring Central Business District.*

<sup>18</sup> Resolution 14-1511

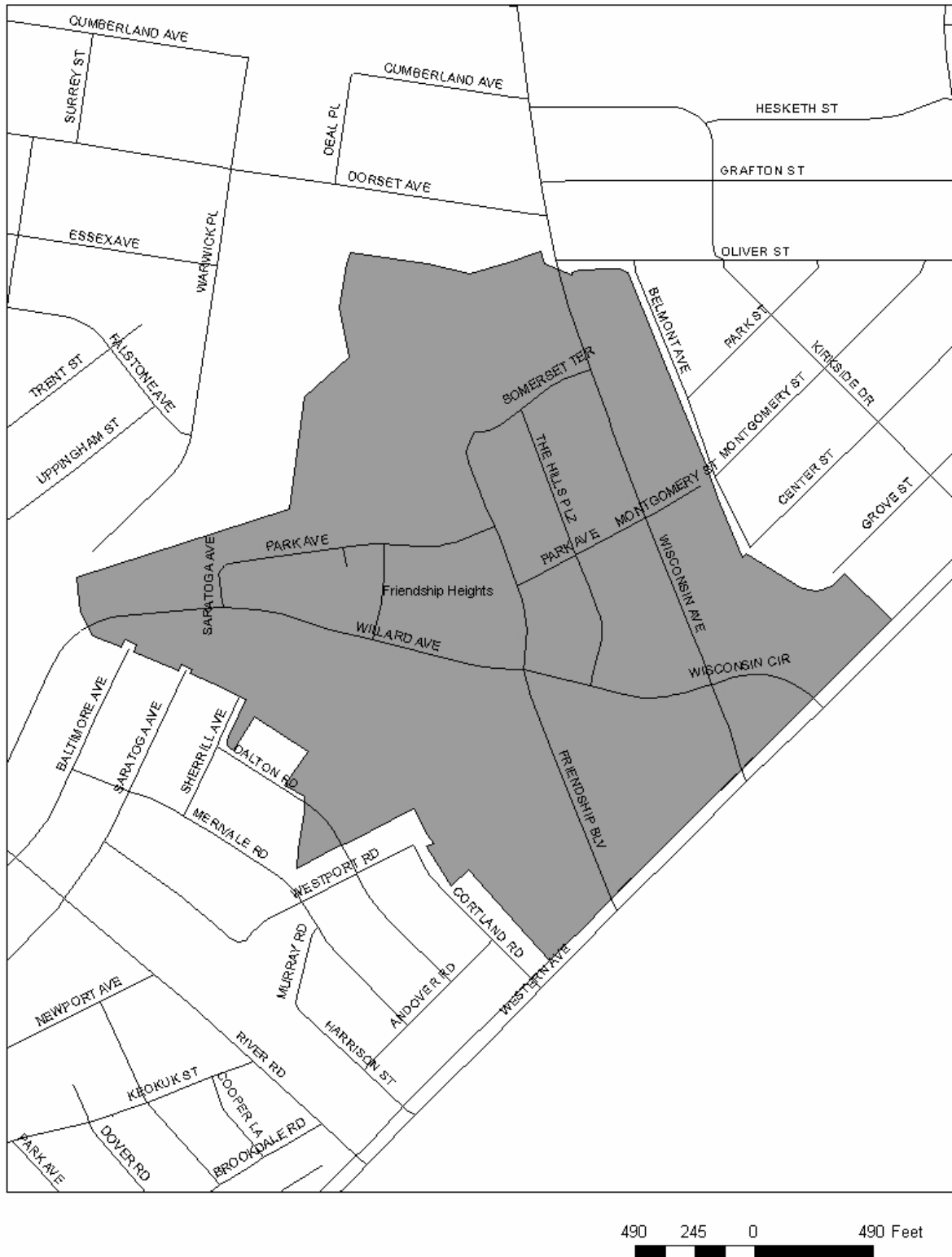
**Exhibit 3-1:  
North Bethesda Transportation Management District**



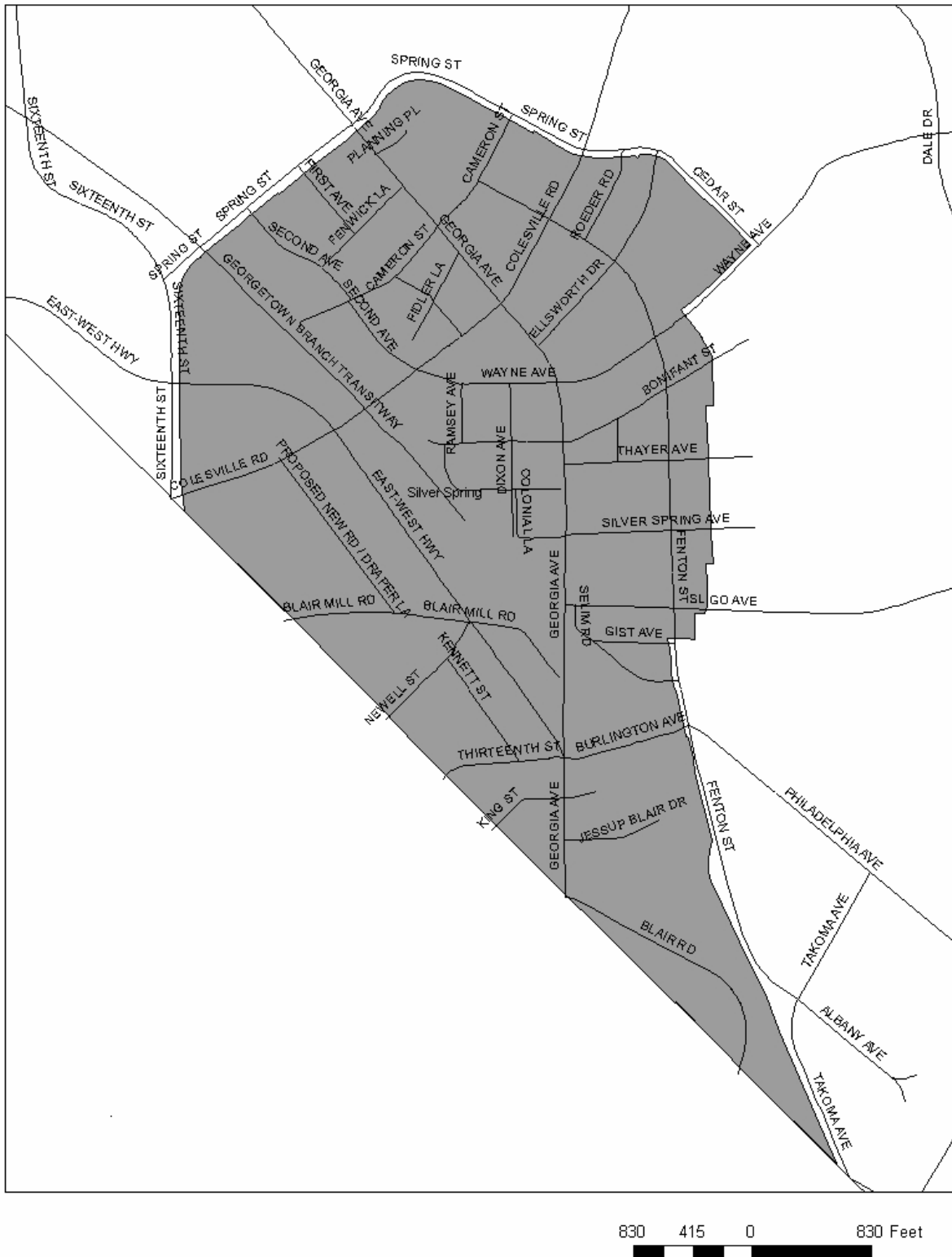
**Exhibit 3-2:  
Bethesda Transportation Management District**



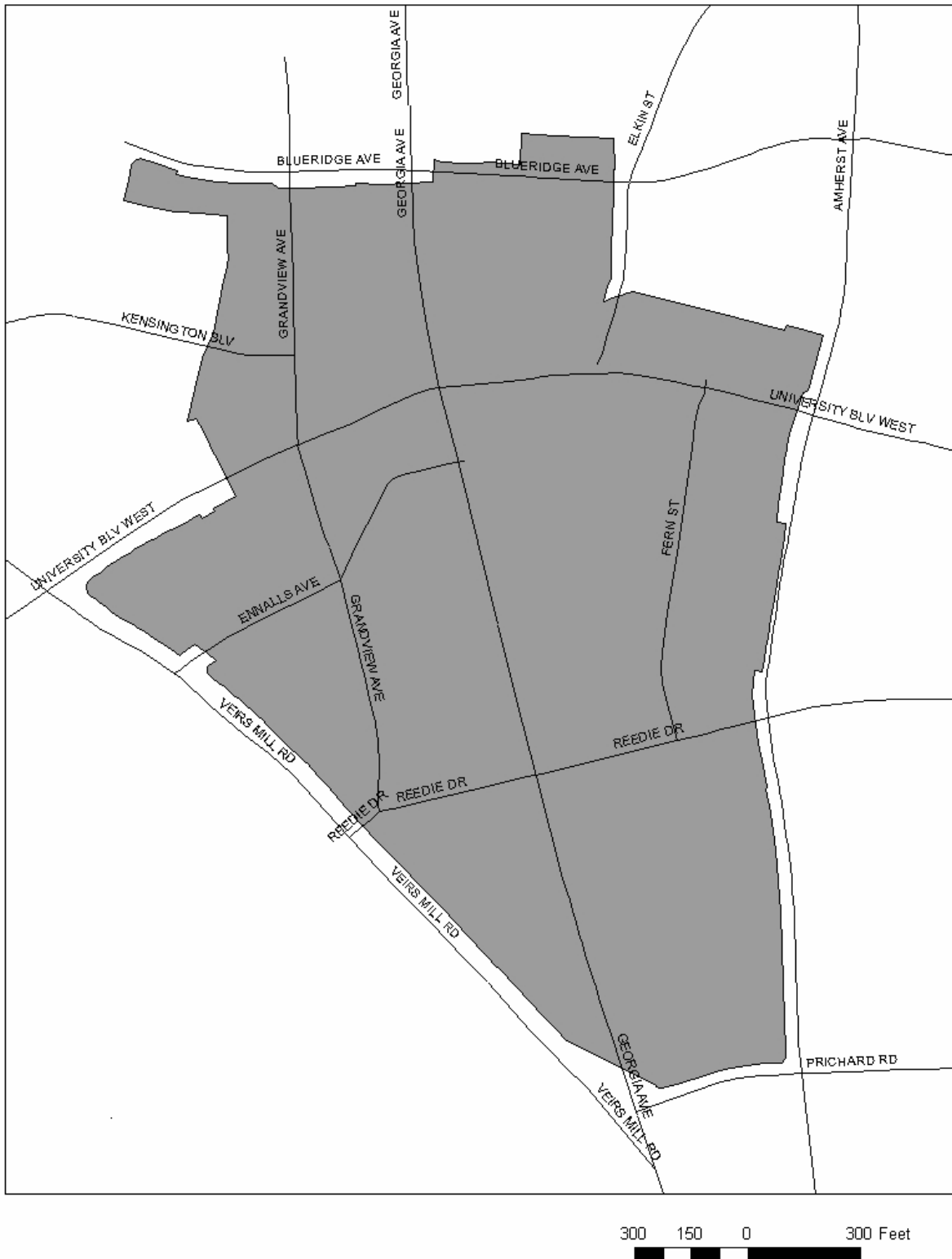
**Exhibit 3-3:  
Friendship Heights Transportation Management District**



**Exhibit 3-4:  
Silver Spring Transportation Management District**



**Exhibit 3-5:  
Wheaton Transportation Planning and Policy Area**



## C. County Transportation Demand Management Policies and Programs

This section describes the transportation demand management policies and programs put in place by the County.

### 1. Master Plans and Growth Policy

The County's transportation demand management strategies in urban areas are guided by area master and sector plans and the Growth Policy. Master and sector plans establish County policy regarding the location and type of growth. These policy documents seek to manage travel demand by concentrating development in urban areas served well by transit. Growth policy transportation review standards (for both Policy Area Mobility Review and Local Area Transportation Review) allow greater levels of congestion in transit-served areas and the reduction of transportation impact tax rates in Metro Station Policy Areas.

Master and sector plans establish goals for "non-auto driver mode share," or a percentage of commuters who travel by a method other than single-occupancy vehicles. These goals are carried over to the Growth Policy, which is revised on a biannual basis. The table below shows the mode share goals for each TMD. The 1989 Wheaton CBD Sector Plan does not include a mode share goal.

**Table 3-2: TMD Non-Auto Driver Mode Share Goals**

<b>TMD</b>	<b>Adoption Date</b>	<b>Non-Auto Driver Mode Share Goal</b>
North Bethesda	1994	39%
Bethesda	1994	37%
Friendship Heights	1998	39%
Silver Spring	2000	50% - new nonresidential development 46% - employers with 25 or more employees

Source: County Council Resolution 16-376, 2007-2009 Growth Policy

In Bethesda, mode share achievement levels control the staging of development approvals. For example, before moving from Stage One development to Stage Two development under the 1994 Bethesda CBD sector plan, downtown Bethesda had to achieve a mode share of 32 percent.

### 2. Transit Network

The County's transit network consists of inter-related systems: MTA Commuter Buses, MARC Train, Metrorail, Metrobus, and Ride On Bus. The Maryland Transit Administration (MTA) operates MTA Commuter Buses and MARC and the Washington Metropolitan Area Transit Authority manages Metrobus and Metrorail. The County Department of Transportation operates the Ride On Bus system.



*MTA Commuter Buses:* The Maryland Transit Administration operates three commuter buses that serve Montgomery County. Two of the buses travel the Route 29 corridor with stops in Burtonsville and Silver Spring. The third bus travels the I-270 corridor with stops at Shady Grove Metro station and several stops in the Rock Springs Business Park in the North Bethesda TMD. Buses primarily travel southbound during the morning commute and northbound in the afternoon and evening.

*MARC Train:* The MARC train Brunswick Line serves Montgomery County with 11 stations, including a stop in Silver Spring. During the morning commute, nine trains run southbound to Washington, DC only. One afternoon train runs northbound only, and nine trains run northbound only in the evening. Trains do not run on weekends. Trains do not stop at all stations on each run.

*Metrorail:* The Metrorail red line serves Montgomery County at 12 stations along the MD 355 and MD 97 corridors, including stations in North Bethesda (Twinbrook, White Flint, and Grosvenor) and in the Bethesda, Friendship Heights, Silver Spring, and Wheaton Central Business Districts. During peak commute times (weekdays 5 a.m.- 9:30 a.m. and 3 - 7 p.m.) trains run between Shady Grove and Glenmont with five minute headways and between Silver Spring and Grosvenor with 2.5 minute headways.

DOT reports that on an average weekday, about 85,000 people board Metrorail in Montgomery County. Stations with the most boardings are Silver Spring and Shady Grove (about 15,000 each) followed by Bethesda and Friendship Heights (about 10,000 each).

*Metrobus:* WMATA operates 21 bus routes in Montgomery County. At least 20 of these routes serve the four TMDs and the Wheaton TPPA during peak hours. Headways on these routes vary from three to 30 minutes. WMATA reported a 2.4 percent ridership increase for Montgomery County routes in FY08.<sup>19</sup>

*Ride On Bus:* The County Department of Transportation operates the Ride On Bus system. Ride on operates 77 weekday routes, 42 Saturday routes, and 33 Sunday routes. Also, Ride On operates three Metrobus routes on the weekends. During peak periods, Ride On operates 77 routes with headways ranging from 30 minutes to less than 10 minutes. 37 of these routes serve TMDs or the Wheaton TPPA.

Ride On reports that for peak period bus service, 79 percent of the County's population lives within a ¼ mile from a Ride On bus route and 89 percent of employment in the County is within ¼ mile from a bus route.<sup>20</sup>

Over the last four years, Ride On reports that ridership has increased by 28 percent. In FY08, overall ridership increased by 5.1 percent from FY07. In comparing weekday trips in June 2007 and June 2008, Ride On found an increase of 6.2 percent. Ride On also reported a *decrease* in schedule adherence from FY07 to FY08, with 82.1 percent of trips running on time in FY07 compared to 79.3 percent in FY08.

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<sup>19</sup> Department of Transportation

<sup>20</sup> September 25, 2008 memo from Deputy Council Staff Director Orlin to the Transportation, Infrastructure and Environment Committee.

Ride On routinely collects route-specific ridership data and gathers additional information when they receive reports of overcrowding or schedule adherence problems. Ride On reports that 12 - 15 routes currently reach capacity during peak hours on regular basis. As a result, many buses must pass bus stops without picking up passengers for lack of space. When possible, Ride On redistributes resources from underutilized routes to stronger performing routes.

Table 3-3 summarizes the level of rail and bus transit service available to County commuters.

**Table 3-3: Summary of County Transit Network Peak Hour Service**

Area	MTA Commuter Bus	MARC Stations	Metrail Stations	Metrobus Routes	Ride On Bus Routes
Countywide	3 routes Headways vary	11 stations Headways vary	12 stations 2.5 and 5 min. headways	21 routes 3-30 min. headways	77 routes 4-30 min. headways
TMDs/TPPA	3 routes Headways vary	1 station Headways vary	7 stations 2.5 and 5 min. headways	20 routes 3-30 min. headways	37 routes 8-30 min. headways

### 3. Bicycle Facilities and Pedestrian Facilities

The presence of a well developed bicycle and pedestrian network assists some commuters' travel to urban centers and provides mobility options within an urban center for employees who do not travel by automobile.

#### a. Bikeways

The County's 2005 Countywide Bikeways Functional Master Plan includes bikeways throughout the County that connect "major activity centers: municipalities, central business districts, town centers, transit stations, major employment hubs, countywide park trails and regional parks."<sup>21</sup> In all, the plan includes about 200 existing and proposed bikeways (about 500 miles). The table below provides a brief summary of the number of existing, partially completed, and proposed bikeways that connected directly to urban centers as of 2005. As shown in Table 3-4, the majority of planned urban center bikeways are unbuilt.

**Table 3-4: Bikeways Serving Urban Centers, 2005**

TMD/TPPA	Existing	Partially Completed	Planned
North Bethesda	4	5	19
Bethesda	3	1	12
Friendship Heights	0	0	3
Silver Spring	1	1	6
Wheaton	0	1	6
<b>TOTAL</b>	<b>8</b>	<b>8</b>	<b>46</b>

Source: 2005 Countywide Bikeways Functional Master Plan

<sup>21</sup> 2005 Countywide Bikeways Functional Master Plan, p. 1

Bikeway planning, design, and construction may be funded by the County, State, Federal Government, or private developers.

Montgomery County: Bikeway construction may be included in capital improvement projects for road improvements, intersection improvements, the annual bikeway program, the annual sidewalk program, independent sidewalk projects, streetscape projects, and independent bikeway projects. The County's FY09-FY14 Capital Improvements Program (CIP) includes an Annual Bikeway Program that "plans, designs, and constructs bikeways and trails throughout the County." The CIP allocates about \$3 million over six years to this project and specifies that facilities constructed under this project "will cost less than \$300,000 each." The current CIP also includes four independent bikeway projects, including one in the Silver Spring TMD.

State of Maryland: Bikeways on or alongside State highways may be constructed with funding from the State of Maryland's consolidated Transportation Program. This program receives funding from vehicle titling and registration fees, gas taxes, corporate income taxes, and Federal funding.

Federal Government: The State receives annual Federal transportation funding that may be used for bikeway construction. For example, the State used Federal funding to support construction of the Capital Crescent Trail.

Private Developers: Developers may be required to construct or improve bikeways as a condition of development approval.<sup>22</sup>

In FY08, the Council approved a budget of \$100,000 for bikeway maintenance. In FY09, this amount increased to \$250,000.

## **b. Bicycles and Transit**

Metrobus, Metrorail, and Ride On Bus provide bicycle accommodations for people who combine bicycling and transit. MTA Commuter buses do not permit riders to bring bicycles. Specifically,

Metrorail: Metro provides bicycle storage facilities, including lockers and bike racks at Metro stations. Table 3-5 on the next page presents data on storage facilities in the four TMDs and in the Wheaton TPPA. Bicycles are not permitted on trains during peak hours.

Metrobus: All Metrobuses are equipped with bike racks that hold up to two bikes.

Ride On Bus: All Ride On buses are equipped with bike racks that hold up to two bikes.

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<sup>22</sup> 2005 Countywide Bikeways Functional Master Plan, pp. 80-81

**Table 3-5: Bike Storage Facilities in TMDs/TPPA, 2003**

<b>TMD/TPPA</b>	<b>Metro Station</b>	<b>Bike Lockers</b>	<b>Bike Racks</b>	<b>Usage</b>
North Bethesda	Twinbrook	26	68	Lockers – 20% Racks - moderate
	White Flint	20	32	Lockers and racks – less than 50%
	Grosvenor	30	40	Both moderate
Bethesda	Bethesda	44	60	Both near capacity
Friendship Heights	Friendship Heights	22	32	Both near capacity
Silver Spring	Silver Spring	30	40	Lockers – 50% Racks – moderate
Wheaton	Wheaton	20	40	Lockers – 50% Racks – light

Source: 2005 Countywide Bikeways Functional Master Plan

### **c. Pedestrian Facilities**

The County does not have a Countywide functional master plan for pedestrian facilities. The master plans for North Bethesda and the Bethesda, Friendship Heights, and Silver Spring Central Business Districts recommend pedestrian-friendly features such as wider sidewalks on busier streets, streetscaping, mid-block signals for pedestrian crossings, and restrictions on allowing drivers to turn right on red.

DOT maintains sidewalks and makes upgrades such as installing pedestrian countdown signals at crosswalks.<sup>23</sup> DOT also administers Countywide contracts for crosswalk and lighting maintenance. The County makes sidewalk improvements through the Capital Improvements Program. Projects with pedestrian improvements include road projects, independent sidewalk projects, and the Annual Sidewalk Program. The Annual Sidewalk Program primarily targets residential areas and the projects are smaller in scope than independent sidewalk projects. Additionally, the Planning Board may require developers to make pedestrian improvements as part of their development approval.

<sup>23</sup> In downtown Bethesda, the Bethesda Urban Partnership maintains sidewalks within the Bethesda Urban District, which is part of the TMD.

#### 4. Share-a-Ride Districts

County Code Chapter 42A establishes share-a-ride districts in the Silver Spring and Bethesda Central Business Districts. The purpose of share-a-ride districts is to encourage carpooling, vanpooling, and transit ridership. Within these districts, the Code requires the County Executive to establish ridesharing programs that include promoting carpooling/vanpooling and transit, providing personalized ride matching, and promoting incentives such as discounted transit passes.

The Code authorizes the County Executive to establish additional share-a-ride districts in employment areas with large concentrations of office space. The Executive also may establish share-a-ride outreach areas in areas with lower concentrations of office space. The County Executive has designated share-a-ride districts in North Bethesda and Friendship Heights. The Executive has not created any share-a-ride outreach districts.

Within a share-a-ride district, the Code also allows a development to obtain a reduction in its minimum parking requirements from the Planning Board if the developer agrees to participate in a County-operated share-a-ride program, provide ridesharing incentives,<sup>24</sup> and pay an annual fee to the County's ridesharing account (part of the Mass Transit Facilities Fund).<sup>25</sup> The County uses ridesharing account revenue to:

- Operate a program that promotes carpooling, vanpooling, and transit use;
- Provide personalized matching for applicants for carpools or vanpools; and
- Promote ridesharing incentives (e.g., preferential carpool parking or discounted transit passes).

Because all current share-a-ride districts are located in TMDs, DOT offers participation in the parking reduction provisions of share-a-ride districts as one tool for developers to use to meet traffic mitigation requirements (see Section 5, below). The Department of Planning reports that, at present, only nine developments participate in this option.

#### 5. Developer and Employer Traffic Mitigation Measures

*Developer Traffic Mitigation Agreements:* Chapter 42A of the County Code requires all applicants for subdivision or optional method development within a TMD to complete a *traffic mitigation agreement* “to ensure that public transportation will be adequate to meet commuting goals set in the Annual Growth Policy.”<sup>26</sup> The law also permits the County to require developers outside of a TMD to complete a traffic mitigation agreement. Agreements may include measures that limit parking, incentivize carpooling or vanpooling, or subsidize transit. Outside of TMDs, traffic mitigation agreements typically require developments to comply with trip generation limits. Within TMDs, measures included in traffic mitigation agreements must contribute to meeting the area mode share goal established in the Growth Policy.

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<sup>24</sup> MCC §42A-5.

<sup>25</sup> MCC §42A-6.

<sup>26</sup> MCC §42A-25.

DOT's Division of Transit Services and M-NCPPC's Department of Planning work with developers to draft traffic mitigation agreements. For the North Bethesda and Bethesda TMDs, the County contractors who operate the TMDs also comment on proposed traffic mitigation measures. Typically, agreements are submitted with the preliminary plan during the development approval process and finalized with the certified site plan.

The Department of Planning's Division of Transportation Planning monitors traffic mitigation agreement implementation outside of TMDs. DOT monitors implementation within TMDs.

Table 3-6 shows traffic mitigation agreement measures that are either required or suggested by County Code,<sup>27</sup> DOT, or the Planning Board. Appendix A provides a sample agreement.

**Table 3-6: Developer Traffic Mitigation Agreement Measures**  
S = Suggested R = Required

Measure	County Code	DOT/ Planning Board*
Contact person designated to receive and distribute information	S**	R
Permanent display area for transportation information	S	R
Providing periodic space for marketing activities of the district	S	R
Financial or other participation in building or operating on- or off-site transportation facilities or systems	S	S
Limits on parking spaces	S	S
Peak period/Single occupancy vehicle parking charges	S	S
Preferential parking for carpools/vanpools	S	S
Subsidized transit	S	S
ADA information provided (transportation services for people with disabilities)		R
Annual Commuter Survey distributed to employees (supplied by TMD)		R
Compile information on yearly activities and submit Annual Report		R
Guaranteed Ride Home Promotion (regional program offering emergency rides)		R
Information on transit/pooling/other commute alternatives distributed/ posted regularly		R
Carpool/vanpool incentives (e.g., ride matching, reduced-rate parking)		S
Car sharing incentives		S
Facilitate TMD staff presentations to employees and HR/Administrative staff on commuter information/alternatives on periodic basis		S
Transit/bicycle/pedestrian amenities (e.g., bus benches, bike racks, showers)		S

\*Required elements are sometimes adapted to allow for specific circumstances for developers and employers

\*\*Required by law for traffic mitigation agreements outside of TMDs

<sup>27</sup> MCC §42A-24 and 42A-25.

*Employer Traffic Mitigation Plans:* County Code Chapter 42A also requires employers in a TMD who have 25 or more employees to submit a *traffic mitigation plan* to the Department of Transportation.<sup>28</sup> In some cases, DOT may require the owner of a multi-family residential building to submit a plan. Employers submit annual reports on plan implementation to the DOT Division of Transit Services. The Division of Transit Services reports that it aims to make direct contact with employers two to three times per year to assist them with plan implementation.

Table 3-7 lists suggested and required measures that may be included in employer traffic mitigation plans. See Appendix B for a sample traffic mitigation plan.

**Table 3-7: Employer Traffic Mitigation Plan Measures**  
S = Suggested R = Required

Measure	County Code	DOT/ Planning Board*
Alternative work hours	S	S
Carpools/vanpools incentives (e.g., preferential parking location, ride matching, free or reduced-rate parking)	S	S
Peak period/SOV parking charges	S	S
Subsidized transit	S	S
Telework	S	S
Transit/Bicycle/pedestrian amenities (e.g., bus benches, bike racks, showers)	S	S
ADA information provided (transportation services for people with disabilities)		R
Annual Commuter Survey distributed to employees (supplied by TMD)		R
Contact person designated to receive and distribute information		R
Compile information on yearly activities and submit Annual Report		R
Facilitate presentations to employees and HR/Administrative staff on commute information/alternatives on periodic basis		R
Guaranteed Ride Home Promotion (regional program offering emergency rides)		R
Information on transit/pooling/other commute alternatives distributed/ posted regularly		R
Permanent display area for TMD-provided bus schedules and other transportation information		R
Car sharing incentives		S

\*Required elements are sometimes adapted to allow for specific circumstances for developers and employers

<sup>28</sup> MCC §42A-24.

*Active Traffic Mitigation Agreements and Plans:* Table 3-8 shows the active number of traffic mitigation agreements and plans in place both within and outside the transportation management districts.

**Table 3-8: Number of Active Traffic Mitigation Agreements and Plans, November 2008**

Area	Number of Developer Agreements	Number of Employer Plans
North Bethesda	18	160
Downtown Bethesda	16	130
Friendship Heights	3	30
Silver Spring	15	80
All other areas	31	50*
<b>Total</b>	<b>83</b>	<b>450</b>

\*Voluntary plans outside of TMDs

Source: Department of Planning and DOT Transit Services

*Other Traffic Mitigation Efforts:* Although the County does not have jurisdiction over Federal campuses in Montgomery County, the Planning Board and Planning Department provide advisory comments regarding traffic mitigation to the National Capital Planning Commission for specific Federal projects. In addition, DOT's Division of Transit services has worked with Federal agencies to provide employees with information on transportation alternatives. The Division of Transit Services also conducts an annual commuter survey at Federal agencies.

## 6. County Transit Subsidies

The County Government provides financial assistance to employers throughout the County who offer transit subsidies to their employees. Under Federal law, employers may offer up to \$115 per month to employees as a tax free benefit. The County has two transit subsidy programs: Fare Share and Super Fare Share. Under these programs, the County pays a portion of employers' costs for their employees' transit subsidy.

Fare Share is a three-year subsidy offered to employers throughout the County, while Super Fare Share is a nine-year subsidy available only to employers in TMDs. For each program, the County's share of the employer subsidy declines over time. At the end of the program term, employers are encouraged, but not required, to continue providing the subsidy. Table 3-9, on the next page, shows the County and employer subsidy contributions for each year of the programs.



**Table 3-9: County and Employer Contributions to Fare Share and Super Fare Share Programs**

Year	Fare Share		Super Fare Share	
	County	Employer	County	Employer
1	50%	50%	Up to \$114/ month/employee	\$1/month/ employee
2	40%	60%	50%	50%
3	30%	70%	50%	50%
4	No County contribution	No mandatory employer contribution	50%	50%
5			50%	50%
6			40%	60%
7			30%	70%
8			20%	80%
9			10%	90%

Source: DOT, Division of Transit Services

In Wheaton, the County offers a hybrid program. For the first six months the County will pay up to \$114 per employee with the employer paying \$1 per month. After the first six months, the program follows the Fare Share schedule.

## 7. Promoting Alternate Modes of Transportation

The DOT Division of Transit Services Commuter Services Section promotes the use of alternative modes of transportation and implements transportation demand management programs. The responsibilities of the Commuter Services Section include:

- Marketing alternate transportation options to workers and residents in the County;
- Encouraging employers to promote alternate transportation options for their workers;
- Promoting and implementing programs such as Fare Share and Super Fare Share;
- Providing personalized rideshare matching for carpools and vanpools; and
- Overseeing the County's transportation management districts.

The Commuter Services Section implements Countywide outreach and programs and directly manages the Silver Spring and Friendship Heights TMDs and the Wheaton TPPA. For the North Bethesda and downtown Bethesda TMDs, the Commuter Services Section manages contracts with private organizations that provide transportation demand management services.

DOT uses direct mail, advertising, the County website, and special events to reach employers and employees. While DOT offers transportation demand management services and programs to employers in all areas of the County, the Department dedicates the majority of commuter service resources to programs in the transportation management districts.

The table below describes programs and incentives provided or promoted by DOT to encourage commuters to use alternative modes of transportation.

**Table 3-10: Transportation Demand Management Programs Provided or Promoted by DOT**

Program or Incentive	Description
<b>For Employers</b>	
Maryland Commuter Choice Tax Credit	Offers Maryland employers, including 501c(3) or (4) organizations, a tax credit for 50% of the eligible costs of providing commuter benefits, up to a maximum of \$50 per participating employee per month.
SmartBenefits Program	Allows employers to load a transit subsidy directly onto an employee's SmarTrip Card, which can be used on Metrorail, Metrobus, and Ride On buses.
Fare Share and Super Fare Share Programs	Provides County funding to help employers provide transit subsidies
Telework	Employers allow employees to work off-site (e.g., at home) for one or more days per week.
Alternate work schedules	Provides methods for employers to reduce peak travel time trips by offering employees flextime, compressed work week, and job sharing opportunities.
<b>For Employees</b>	
Commuter Information Days	Present information to employees at their worksites about alternative transportation
Transit Information	Provide information about routes and fares for public transit
Customized trip planning	Assist employees to plan a commute trip using the public transit system. Information is available online, by email, and by phone.
Carpools and Vanpools	Personalized rideshare matching for joining or forming a carpool or vanpool Provide information about free or reduced-price parking for carpool or vanpool vehicles. Authorizes free or reduce-price parking permits for carpools or vanpools
Park-and-Ride Lots	Allow motorists to park their vehicle and transition to a carpool, vanpool, or public transit before entering more congested areas
Car Sharing	Short-term car rentals (e.g., Zipcar)
Guaranteed Ride Home	Provides commuters who regularly (twice a week) carpool, vanpool, bike, walk, or take transit to work with a free ride home for unexpected emergencies or for unscheduled, mandated overtime. May be used four times per year. Run by Commuter Connections, Washington Metropolitan Council of Governments.
Biking Information	Provide information on the County's bikeway program, including bike maps and safety tips
TRIPs Commuter Stores	Walk-in location for purchasing fare media, obtaining information about alternative modes of travel, and receiving ride matching assistance

Source: Department of Transportation

## CHAPTER IV: COUNTY PARKING POLICIES AND COMMUTER CHOICE

This chapter discusses how County policies on the supply and cost of parking in urban centers influences commuters' choice of travel mode.

Section A, **Zoning Ordinance Parking Requirements**, describes the Zoning Ordinance requirements for providing parking for new developments;

Section B, **Parking Lot Districts**, describes the purpose of County parking lot districts and the supply and pricing of parking spaces in those districts; and

Section C, **Other Publicly Managed Parking Spaces**, discusses publicly provided parking outside of the parking lot districts.

### A. Zoning Ordinance Parking Requirements

The County Zoning Ordinance establishes minimum parking requirements for different types of land uses. For the most part, these requirements are identical for similar uses throughout the County. However, two provisions lower the number of parking spaces required for office buildings in certain urban centers.

***Metro Station Proximity Parking Reduction:*** The Zoning Ordinance allows for reduction of the minimum parking requirement for office buildings in close proximity to Metro stations. The reduction in office parking requirements varies by geographic area of the County. The urban centers studied in this report are located either in the “southern” or “south central” areas of the County as delineated in the Zoning Ordinance. An office building in one of these centers would qualify for a reduced parking requirement based on its proximity to a Metro station. Table 4-1 shows the minimum parking requirements for office buildings in the “southern” or “south central” areas of the County and the reductions allowed for developments located within 800 feet and 1,600 feet of a Metro station.

**Table 4-1: Office Building Parking Requirements**  
(Parking Spaces per 1,000 Gross Square Feet)

<b>Proximity to Metro Station</b>	<b>Southern County</b> (includes Bethesda, Friendship Heights, and Silver Spring)	<b>South Central County</b> (includes North Bethesda and Wheaton)
Less than 800'	1.9	2.3
800' – 1600'	2.1	2.4
More than 1600'	2.4	2.7

Source: Montgomery County Zoning Ordinance, § 59-E-3.2

The Zoning Ordinance does not grant a parking space reduction for office developments located more than 1,600 feet from a Metrorail station (about one-third of a mile) even if the building is on a route served by Metrobus or Ride On bus.<sup>1</sup> Instead, office buildings in urban centers that

<sup>1</sup> Unless the building is located in a share-a-ride district and the property owner enters into a share-a-ride agreement.

are served by bus transit but located more than a third of a mile from a Metrorail station must provide the same amount of parking as offices located in any other part of the County.

The parking space reductions for developments near Metro stations do not correspond with the commuting goals established in the Growth Policy for these areas. (Growth Policy commuting goals are the target percentage of non-driving workers that commute to an area of the County.) For example, a development in Silver Spring built immediately adjacent to Metro must provide 26 percent fewer parking spaces than a similar development located elsewhere in the County.<sup>2</sup> However, this parking space reduction falls well below the 46 percent non-driver commuting goal for Silver Spring set in the Growth Policy. Table 4-2 compares parking reductions and commuting goals for Silver Spring and North Bethesda. In each case, the Metro proximity parking reduction is substantially less than the target commuting goal. County parking requirements assume that some commuters will travel by alternative means. Therefore, a parking reduction percentage need not be identical to the commuting goal percentage to achieve the same overall modal split.

**Table 4-2: Comparison of Metro Proximity Parking Reductions and Growth Policy Commuting Goals**

	Silver Spring	North Bethesda
Maximum Metro Proximity Parking Reduction	26%	17%
Growth Policy Commuting Goal	46%	39%

*Share-A-Ride District Parking Reduction:* The Zoning Ordinance allows a parking reduction of 15 percent for office buildings in certain areas of the County that are designated as share-a-ride districts. Developers who receive the parking reduction pay an annual fee to the County's ridesharing account, participate in a County-operated share-a-ride program, and provide ridesharing incentives.<sup>3</sup> A development may not receive both the share-a-ride and the Metro proximity parking reduction.

## B. Parking Lot Districts

The County Government is a major supplier of parking spaces in urban centers. The DOT Division of Parking Management oversees County-operated parking facilities.

### 1. Location and Purpose of Parking Lot Districts

Chapter 60 of the County Code establishes the following four parking lot districts in the County:

1. Bethesda Parking Lot District;
2. Silver Spring Parking Lot District;
3. Wheaton Parking Lot District; and
4. Montgomery Hills Parking Lot District.

<sup>2</sup> An office within 800 feet of a Metro must provide 1.9 parking spaces per 1,000 gross square feet (gsf) compared to the 2.4 space per 1,000 gsf required for offices more than 1,600 feet from the Metro. The difference of 0.5 parking spaces per 1,000 gsf is 26% lower than the base parking requirement of 2.4 spaces per 1,000 gsf.

<sup>3</sup> MCC § 59-E-3.31

The Code defines the boundaries of each parking lot district (PLD). Since the Montgomery Hills area does not meet the criteria for an “urban center” as defined in Chapter III, this report focuses primarily on the Silver Spring, Bethesda, and Wheaton Parking Lot Districts.

The County created the parking lot districts in the late 1940s and early 1950s. The purpose of these districts is to give property owners an off-site alternative to satisfying the on-site parking requirements of the Zoning Ordinance. In lieu of providing parking on-site, non-residential property owners in a parking lot district (PLD) may opt to pay an annual ad valorem tax to fund the construction and maintenance of public parking facilities.

## 2. Parking Lot District Capacity and Occupancy Rates

As shown in Table 4-3, PLDs provide more than 20,000 parking spaces in Bethesda, Silver Spring, and Wheaton.

**Table 4-3: Parking Lot District Parking Spaces by Type**

	<b>Bethesda</b>	<b>Silver Spring</b>	<b>Wheaton</b>
Parking Lot Spaces	877	430	427
Parking Garage Spaces	5,822	10,590	628
On-Street Spaces	802	1,046	409
<b>Total spaces</b>	<b>7,501</b>	<b>12,066</b>	<b>1,464</b>

Source: Department of Transportation

In each PLD, the County designates spaces for short-term or long-term use. Short-term parking (less than three hours) is primarily intended for customers and clients of area businesses. Long-term parking (three or more hours) is available for drivers who work in the area or who switch to transit to complete their commute.

DOT periodically adjusts the mix of short-term and long-term parking spaces based on parking space vacancy rate surveys and input from parkers and businesses. As shown in Table 4-4 on the following page, DOT allocates the majority of PLD parking spaces for long-term parkers; however, short-term visitors often will park in long-term spaces. Since current land use patterns in Silver Spring require more parking for full-day employees, the Silver Spring PLD has the largest percentage of long-term spaces (84%). By comparison, in Wheaton, where a higher percentage of parkers are customers of retail establishments, DOT has designated a relatively high percentage (37%) of PLD space for short-term parking.

**Table 4-4: Mix of Short-Term and Long-Term Parking Spaces (June 2008)**

	Bethesda	Silver Spring	Wheaton
Short-Term Spaces	24%	10%	37%
Long-Term Spaces *	72%	84%	61%
Other Spaces **	4%	6%	2%
<b>Total spaces</b>	<b>7,501</b>	<b>12,066</b>	<b>1,464</b>

Source: Department of Transportation

\* Long-term spaces include carpool and permit spaces.

\*\* Other spaces consist of handicapped parking and spaces reserved for government vehicles.

Parking space peak hour occupancy rates also vary among the PLDs. DOT conducts monthly surveys of parking facility occupancy rates during peak usage hours (weekdays from 10 a.m. to 2 p.m.). As shown in Table 4-5, in FY08, about 84 percent of Bethesda PLD spaces were occupied during peak hours. Silver Spring and Wheaton occupancy rates were both near 60 percent. In all PLDs, occupancy rates were significantly higher for long-term spaces than for short-term spaces.

**Table 4-5: Parking Lot District Occupancy Rates (Peak Hours, FY08)**

	Bethesda	Silver Spring	Wheaton
Short-Term Spaces	78%	49%	57%
Long-Term Spaces *	86%	61%	62%
All Spaces	84%	60%	61%

Source: Department of Transportation

\* Long-term spaces include carpool and permit spaces.

## 2. Parking Lot District Rates

The Council establishes parking rates for each PLD by resolution. PLD parking rates include different rates for short-term parking (less than three hours), long-term parking (three or more hours), daily permits, and monthly permits. Table 4-6 shows the PLD parking rates approved by the Council to take effect on July 1, 2008.<sup>4</sup>

**Table 4-6: Parking Lot District Parking Rates – Effective July 1, 2008**

	Bethesda	Silver Spring	Wheaton
Short-term rate (up to 3 hours)	\$0.75 / hour	\$0.75 / hour	\$0.50 / hour
Long-term rate (3 or more hours)	\$0.50 / hour	\$0.50 / hour	\$0.50 / hour
Daily permit rate	\$8.25 / day	\$6.00 / day	Not available
Monthly permit rate			
Single-occupant vehicle	\$95.00 / month	\$95.00 / month	\$95.00 / month
2 person carpool	\$70.00 / month	\$65.00 / month	Not available
3 or 4 person carpool	\$40.00 / month	\$35.00 / month	Not available
5 or more person carpool	\$10.00 / month	\$5.00 / month	Not available

Source: Department of Transportation

***Short-Term versus Long-Term Parking Rates:*** As seen in Table 4-6, the short-term hourly rate is \$0.25 higher than the long-term hourly rate in the Bethesda and Silver Spring PLDs. In the Wheaton PLD, the short-term and long-term hourly rates are the same.

***Daily Parking Permit Rates:*** The Bethesda and Silver Spring PLDs offer daily parking permits. At \$8.25 per day, the permit fee in Bethesda is 38 percent higher than the Silver Spring permit fee of \$6.00 per day.

***Monthly Permits:*** At \$95 per month, the cost of a monthly parking permit is identical in the Bethesda, Silver Spring and Wheaton PLDs.

***Carpool Discounts:*** In the Bethesda and Silver Spring PLDs, the County discounts the \$95 monthly parking permit for carpools. In Bethesda, a monthly parking permit for a two-person carpool is \$70 (a 26% discount) and a permit for a five-person carpool is \$10 (an 89% discount). The carpool discounts in the Silver Spring PLD are even higher. The County does not offer discounted rates for carpools in the Wheaton PLD.

In many urban centers around the country, commercial entities control the majority of paid parking spaces. In communities such as these, the private sector sets parking prices based on market demand. Commercial parking facilities in urban centers must raise revenue to cover the cost of facility construction and operations. While the Council must set PLD rates to meet

<sup>4</sup> Council Resolution 16-589, adopted May 22, 2008.

revenue bond and operating requirements, its price setting does not take market considerations into account. As a result, PLD parking rates in some areas fall well below rates charged in privately-operated commercial facilities. For example, while the County charges \$95 for a monthly PLD permit, a monthly pass in a commercial facility in the Bethesda Central Business District currently costs between \$120 and \$145 according to a recent DOT pricing survey.

### C. Other Publicly Managed Parking Spaces

The five urban centers that are the focus of this report include two areas that do not have parking lot districts: North Bethesda and Friendship Heights. Even without a formal parking lot district, a supply of public parking exists in these two areas. In North Bethesda, the County manages over 1,000 parking spaces. On-street spaces are paid, while parking lot spaces are free. As shown in Table 4-7, a majority of these spaces are designated for short-term parking.

**Table 4-7: County-Provided Parking Spaces in North Bethesda**

Parking Duration		Parking Spot Location	
Short-Term Metered Spaces	632	On-Street Spaces	889
Long-Term Metered Spaces	257		
Non-Metered Spaces	200	Parking Lot Spaces	200
<b>Total spaces</b>	<b>1,089</b>	<b>Total spaces</b>	<b>1,089</b>

Source: Department of Transportation

In the Friendship Heights Transportation Management District, the Village of Friendship Heights manages 200 short-term on-street parking spaces.



## **CHAPTER V: TRANSIT AND TRANSPORTATION DEMAND MANAGEMENT FUNDING**

Transportation infrastructure, including rail and bus systems, bikeways, and pedestrian facilities are funded through multiple County and non-County sources. This chapter describes the major sources of funding for County transit and transportation demand management programs in four sections:

Section A, **Transit System Funding**, identifies the funding sources for transit systems serving the County.

Section B, **County Transportation Demand Management Program Funding**, identifies the funding sources for County transportation demand management programs.

Section C, **State and County Transportation Funds**, describes two transportation funds that are major sources of transit and transportation demand management funding.

Section D, **County Special District Revenue**, presents information on the sources and uses of revenue collected in County transportation management and parking lot districts.

### **A. Transit System Funding**

As detailed in Chapter III, multiple public transit systems serve Montgomery County. Each system receives funding from different sources.

#### **1. WMATA Funding**

The Washington Metropolitan Transit Authority (WMATA) operates the Metrorail and Metrobus systems. WMATA receives most of its operating revenue from passenger fares, parking and advertising fees, and payments from state and local governments. WMATA funds its capital program primarily through Federal grants and contributions from state and local governments. The State of Maryland uses revenue from the Maryland Transportation Trust Fund to pay Montgomery and Prince George's Counties' obligations to WMATA. (See page 42 for a discussion of the Maryland Transportation Trust Fund revenue sources.) In FY08, the Maryland contribution to WMATA for Montgomery County was \$118.9 million.

#### **2. Ride On Funding**

The Department of Transportation operates the Ride On Bus system. Funding for the Ride On system comes from the County's Mass Transit Fund. In FY08, the operating budget for Ride On was \$94.9 million. (See page 42 for a discussion of the Mass Transit Fund revenue sources.)

#### **3. MTA Commuter Bus and MARC Train Funding**

The Maryland Transit Administration (MTA) manages commuter bus services and the MARC commuter rail service through contracts with private organizations. The Maryland Transportation Trust Fund is the funding source for MARC train service and MTA Commuter Buses.

## B. County Transportation Demand Management Program Funding

Multiple revenue sources fund County transportation demand management programs.

### 1. Transportation Management District (TMD) Activities

The Department of Transportation manages the Friendship Heights and Silver Spring Transportation Management Districts and contracts with private organizations for the management of the Bethesda and North Bethesda Transportation Management Districts. As detailed in Chapter III, TMD personnel manage and promote a series of programs to encourage alternative commuting modes. TMD staffing and programs are funded from transportation management fee revenue (see pages 42-43) and from the County Mass Transit Fund. Some TMDs also receive a transfer of parking revenue collected in the district (see page 43). Table 5-1 summarizes the FY08 funding sources for each TMD.

**Table 5-1: FY08 Funding Sources for Transportation Management Districts**

	North Bethesda	Downtown Bethesda	Friendship Heights	Silver Spring
<b>Parking Revenue</b>	✓	✓		*
<b>TMD Fees</b>	✓	✓	✓	**
<b>Mass Transit Fund</b>			✓	✓

\*Use of Silver Spring parking revenue is authorized in County Code, and in FY09 the budget assumes that PLD revenue will support the Super Fare Share program in Silver Spring.

\*\*DOT expects to collect TMD fees in FY09.

Although there is no TMD in Wheaton, the County uses Parking Lot District Fund and Mass Transit Fund revenue to support transportation demand management activities in Wheaton.

### 2. Commuter Services

The Commuter Services Section of the DOT Division of Transit Services implements and promotes programs to encourage alternative commuting modes (see Chapter III). In FY08, the annual budget for the Commuter Services Section was \$5,514,060.<sup>1</sup> The Montgomery County Mass Transit Fund is the primary funding source for the Commuter Services Section. Commuter Services also receives funding from TMD fees, share-a-ride parking reduction fees, parking revenue, and grants from the Maryland Transit Administration and the Metropolitan Washington Council of Governments.

<sup>1</sup> The FY08 Commuter Services Section budget included \$671,840 for operation of the Bethesda Circulator shuttle bus. This item was transferred to the budget of the Bethesda Regional Services Center in FY09.

## C. State and County Transportation Funds

As mentioned earlier in this chapter, two special transportation funds are major sources of transit and transportation demand management funding.

### 1. Maryland Transportation Trust Fund

The Maryland Transportation Trust Fund is a dedicated fund supporting the programs and activities of the Maryland Department of Transportation. The Transportation Trust Fund finances Department operating, capital, and debt service expenses, including the State's contribution to WMATA and the operation of MARC trains and MTA Commuter Buses. The largest revenue sources for the Transportation Trust Fund are a State gas tax and motor vehicle taxes and fees. Although the Fund receives dedicated revenue, Fund resources are subject to appropriation by elected officials and are not earmarked for specific programs such as transit.

### 2. Montgomery County Mass Transit Fund

The County's Mass Transit Fund finances the planning, development, and implementation of transit programs and facilities. More specifically, the Mass Transit Fund supports operation of the Ride On bus system, transportation demand management programs, and other activities of the DOT Division of Transit Services. As illustrated in Table 5-2, Mass Transit property tax revenue contributes about two-thirds of all Mass Transit Fund resources. Other large contributors to the Mass Transit Fund are State aid and Ride On fare revenue.

**Table 5-2: FY08 Mass Transit Fund Sources of Revenue**

Revenue Source	FY08 Amount	Percent of Total
Mass Transit Property Tax	\$87,469,710	66.5%
State Aid	\$25,092,540	19.1%
Ride On Fare Revenue	\$13,470,470	10.2%
Other	\$5,523,980	4.2%
<b>Total</b>	<b>\$131,556,700</b>	<b>100.0%</b>

Source: Office of Budget and Management

## D. County Special District Revenue

The County's transportation management districts (TMDs) and parking lot districts (PLDs) each collect revenue that support County transportation demand management activities.

### 1. Transportation Management District Revenue

The County Code authorizes the County to charge a fee in TMDs to fund transportation demand management activities, including TMD administration and implementation of traffic mitigation plans and agreements.<sup>2</sup> Transportation management fee revenue must be used in the district in which the development or property subject to the fee is located.

<sup>2</sup> MCC § 42A-29.

The current transportation management fee for all County TMDs is \$0.10 per square foot of gross floor area in commercial properties. The fee applies only to commercial properties either occupied after June 2006 or subject to a TMD fee as a condition of subdivision or optional method approval in June 2006 or earlier.<sup>3</sup> In FY08, the County collected a total of about \$270,000 in transportation management district fee revenue from the Bethesda, North Bethesda, and Friendship Heights TMDs. In FY08, the County did not receive any TMD revenue from Silver Spring because no developments required to pay the fee had been completed. DOT expects to begin collecting TMD fees in Silver Spring in FY09.

## 2. Parking Lot District Revenue

As detailed in Chapter 4, the County constructs and maintains public parking in the Bethesda, Silver Spring, and Wheaton Parking Lot Districts. PLDs receive revenue from a special district tax, parking fees, and parking fines.

**Special District Tax:** The County Code established each PLD as a special taxing district.<sup>4</sup> Within these districts, the Code authorizes the County to collect an annual ad valorem tax from non-residential property owners who opt not to provide on-site parking.<sup>5</sup> The Code exempts property owners of buildings that meet their entire off-street parking requirement from paying the special district tax.<sup>6</sup>

The Council sets PLD real property and personal property tax rates by resolution annually. The County Code limits the PLD special tax rate to no more than:

- \$1.00 per \$100 of assessed value for improved real property; and
- \$1.00 per \$100 of assessed value for personal property.<sup>7</sup>

Table 5-3 shows the Council-approved PLD special tax rates for improved properties for FY08.

**Table 5-3: FY08 Parking Lot District Special Tax Rates<sup>8</sup>**  
(per \$100 assessed value)

	Bethesda	Silver Spring	Wheaton
Improved Real Property	\$0.28	\$0.28	\$0.24
Personal Property	\$0.70	\$0.70	\$0.60

Source: Department of Finance

<sup>3</sup> Council resolution 16-589, May 22, 2008.

<sup>4</sup> MCC § 60-1.

<sup>5</sup> MCC § 60-3.

<sup>6</sup> The exemption applies only to the building but not to the land on which it stands.

<sup>7</sup> MCC § 60-3(a).

<sup>8</sup> The rates for unimproved properties are one-half the rates for improved properties.

*Other PLD Revenue:* PLDs also receive revenue from parking fees, parking fines, and investment income. However, for each PLD, parking fees and special district taxes are the largest sources of revenue. Table 5-4, below, shows estimated FY08 PLD revenue by source.

**Table 5-4: Estimated FY08 Parking Lot District Revenue**

Source of Revenue	Bethesda	Silver Spring	Wheaton
Special District Taxes	\$5,162,550	\$5,402,120	\$497,570
Parking Fees	\$8,745,000	\$7,804,610	\$725,000
Parking Fines	\$4,700,000	\$2,400,000	\$493,120
Investment Income	\$932,400	\$329,000	\$58,800
<b>Total Revenue</b>	<b>\$19,539,950</b>	<b>\$15,935,730</b>	<b>\$1,774,490</b>

Source: Approved FY09 Operating and Capital Budgets, Schedule C-3.

The County Code restricts spending taxes and fees collected in a PLD to uses within that PLD.<sup>9</sup> The Code states that the primary use of PLD revenue is to acquire, build, restore, improve, maintain, and operate off-street parking facilities. In addition, the Code allows the Council to transfer parking fee revenue from a PLD for the following uses:

1. Funding an urban district;
2. Supporting the activities of a transportation management district;
3. Implementing transit and ridesharing incentive programs; and
4. Establishing public-private partnerships to increase ridesharing and transit usage.

No legal requirement exists to direct parking fine revenue to any special fund. Nonetheless, County practice is to allocate \$25 of each fine to the Mass Transit Fund to support transportation demand management activities in the district where the parking violation occurred and to allocate the remaining fine revenue to the PLD fund where the parking violation occurred.

In recent years, the Council has approved a transfer of funds from the Bethesda, Silver Spring, and Wheaton PLDs to their respective urban districts. In addition, relatively small amounts of revenue from each PLD were transferred to the General Fund to cover parking district overhead costs.

In each year from FY04 – 08, the County transferred Bethesda PLD revenue to support the Bethesda TMD. During those same years, the Silver Spring PLD provided no funds to the Silver Spring TMD.<sup>10</sup> As mentioned above, the County annually transfers funds from the Wheaton PLD to pay for transportation demand management activities in Wheaton.

<sup>9</sup> MCC § 60-16.

<sup>10</sup> In FY09, the budget assumes a transfer of about \$200,000 for the Silver Spring PLD to support the Super Fare Share program in Silver Spring.

Table 5-5 shows the FY08 estimated PLD expenditures and transfers to other funds.

**Table 5-5: Estimated FY08 Parking Lot District Expenditures and Transfers**

	Bethesda	Silver Spring	Wheaton
<b>PLD Expenditures</b>	<b>\$19,137,350</b>	<b>\$12,983,270</b>	<b>\$1,465,050</b>
Operating Budget	\$9,387,370	\$9,973,250	\$1,181,050
Capital Projects (incl. debt service)	\$9,749,980	\$3,010,020	\$284,000
<b>Transfers to Other Funds</b>	<b>\$6,263,380</b>	<b>\$1,948,370</b>	<b>\$814,240</b>
to Urban District	\$2,065,900	\$1,718,700	\$373,700
to TMD	\$1,745,810	\$0	\$0*
to Mass Transit Fund	\$2,236,780	\$0	\$408,110*
to General Fund	\$214,890	\$229,670	\$32,430
<b>Total Expenditures + Transfers</b>	<b>\$25,400,730</b>	<b>\$14,931,640</b>	<b>\$2,279,290</b>

Source: Approved FY09 – 14 Public Services Program: Fiscal Plan

\* The Wheaton PLD provides funds to the Mass Transit Fund to pay for transportation demand management activities in Wheaton. In FY08, the amount of this transfer was \$195,260 and is included in the total transfer from the Wheaton PLD to the Mass Transit Fund in the table.

Although the County has not established a parking lot district in North Bethesda, as described in Chapter IV the County provides public parking lots and on-street parking within the North Bethesda TMD. In FY08, the County collected about \$975,000 in North Bethesda parking fees and fines.

## CHAPTER VI: TRANSPORTATION DEMAND MANAGEMENT IN OTHER COMMUNITIES

This chapter summarizes the current transportation demand management (TDM) practices in Montgomery County, identifies additional or alternative TDM practices, and discusses the potential applicability of these additional or alternative practices to the County. This chapter has five sections:

Section A, **Dedicated Funding Sources for Transit**, presents methods used in other jurisdictions to dedicate funding for transit.

Section B, **Economic Incentives**, describes incentive programs to encourage commuting by transit and other alternative modes.

Section C, **Driving Disincentives**, describes strategies used in other communities to make driving alone less attractive than other commuting options.

Section D, **Location and Design of Transportation Network**, discusses how some jurisdictions have altered transportation networks to promote efficient commuting practices.

Section E, **Centrally Managed System Governance**, describes transportation demand management systems that consolidate a wide range of services into one integrated, centrally-managed program.

### A. Dedicated Funding Sources for Transit

Most major transit systems in the United States receive a substantial portion of their capital and/or operating resources from a dedicated revenue source. The Federal Government defines the three characteristics of a dedicated funding source for transit:

- Funding must come from a specific designated revenue source;
- Revenue from the designated source must be provided directly to a transit agency; and
- Designated revenue must not be subject to appropriation.<sup>1</sup>

According to the United States General Accountability Office (GAO), 23 of the 25 largest transit agencies in the country receive funds from dedicated revenue sources.<sup>2</sup> The Washington Metropolitan Area Transit Authority (WMATA) is one of the two largest systems that do not receive dedicated funding. While the County's Mass Transit property tax is dedicated to funding transit programs, the tax rate has fluctuated significantly in recent years thereby reducing the stability of this revenue source.

WMATA receives most of its operating revenue from passenger fares, parking and advertising fees, and payments from state and local governments. WMATA funds its capital program primarily through Federal grants and contributions from state and local governments. The State of Maryland uses revenue from the Maryland Transportation Trust Fund to pay Montgomery and

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<sup>1</sup> United States Government Accountability Office Report GAO-06-516, *Issues Related to Providing Dedicated Funding for the Washington Metropolitan Area Transit Authority*, May 2006.

<sup>2</sup> Ibid.

Prince George's Counties' obligations to WMATA. Major revenue sources for the Maryland Transportation Trust Fund include the State's gas tax, motor vehicle taxes, and Motor Vehicle Administration fees.

The County's Mass Transit Fund supports operation of the County's Ride On bus system and other transit related activities. The three largest contributors to the Mass Transit Fund are property tax revenue, State aid, and Ride On fares.

The County Code authorizes the County to charge a fee in transportation management districts (TMDs) to fund transportation demand management activities including TMD activities and implementation of traffic mitigation plans and agreements.<sup>3</sup> Revenue from transportation management district fees must be used in the district where the development or property subject to the fee is located. While this fee supports transportation demand management programs, it does not directly fund transit system operating or capital costs.

## 1. Sales Taxes

Sales tax revenue is the most common dedicated revenue source for transit systems in the country. According to the GAO, 15 of the 23 largest transit agencies with dedicated funding received a portion of their revenue from sales taxes.<sup>4</sup> Table 6-1 lists examples of metropolitan transit systems that receive dedicated sales tax revenue.

**Table 6-1: Examples of Metropolitan Transit Systems with Dedicated Sales Tax Revenue**

Area / Transit System	Sales Tax Revenue Dedicated to Transit
Atlanta / Metro Atlanta Rapid Transit Authority (MARTA)	All revenue from a 1% sales tax levied in the region
Boston / Massachusetts Bay Transit Authority (MBTA)	20% of revenue from a 5% sales tax levied in the region
Dallas / Dallas Area Rapid Transit (DART)	All revenue from a 1% sales tax levied in the transit district
New York / Metropolitan Transit Authority (MTA)	All revenue from a 3/8% sales tax levied in the region
San Francisco Bay / Bay Area Rapid Transit (BART)	75% of revenue from a 1/2% sales tax levied in the transit district
Seattle / Sound Transit (ST)	All revenue from a 4/10% sales tax levied in the region

<sup>3</sup> MCC § 42A-29.

<sup>4</sup> United States Government Accountability Office Report GAO-06-516, May 2006.



*Applicability to Montgomery County:* Maryland law prohibits counties from imposing sales taxes.<sup>5</sup> Legislation was introduced in the 2007 session of the Maryland General Assembly which would have dedicated a percentage of State sales tax revenue for transit operating and capital programs.<sup>6</sup> The bill received an unfavorable report from the Senate Budget and Taxation Committee and was never acted upon by the full State Senate.

## **2. Transportation Improvement Districts**

“Transportation improvement districts” (also known as “transportation development districts” or “community improvement districts”) are special taxing districts designed to raise revenue for transportation improvements in a specific area. Several states allow the creation of transportation improvement districts as separate governmental entities authorized to levy taxes and issue bonds.

The laws of some states require a majority of property owners within the proposed boundary of the district to vote in favor of creating a district. In addition, in some states, transportation improvement districts may cross municipal boundaries. However, the establishment of a transportation improvement district does not exempt developments from complying with municipal zoning requirements and transportation infrastructure plans.

Most transportation improvement districts levy a property tax assessment on commercial properties within the district. Some districts impose an additional charge on new development projects to cover all or a portion of the cost of transportation improvements needed to accommodate the new trips generated by that development (a type of “impact tax”). Transportation improvement district tax revenue most commonly supports roadway infrastructure improvements. However, in many districts, revenue also funds transit system capital or operating expenses.

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<sup>5</sup> Annotated Code of Maryland, Tax-General Article, § 11-102 (c).

<sup>6</sup> SB 167.

### Case Study: Transportation Improvement District Funding for Dulles Rail Transportation Improvement District, Virginia

In March 2001, the Virginia General Assembly passed legislation to establish the Dulles Rail Transportation Improvement District as a special taxing district within Fairfax County and the Town of Herndon. The purpose of the District is to provide funding for the construction of a 23-mile extension of the Metrorail system from the West Falls Church station through the Tysons Corner area to Dulles Airport. The Virginia law stipulated that the District would be created upon receipt of a petition from property owners of at least 51 percent of the assessed commercial and industrial properties in the District. In 2004, property owners representing 64 percent of assessed property values petitioned Fairfax County to establish the District. That same year, Fairfax County began to levy a charge of 22 cents per \$100 of assessed value on commercial and industrial property owners in the District.

The Dulles Rail Transportation Improvement District is not the sole dedicated source of revenue for construction of the Metrorail extension. In 2005, the Commonwealth of Virginia Transportation Board approved a fee structure for the Dulles Toll Road that sets aside revenue for this transit project. The Transportation Board requires that no less than 85 percent of “existing surplus net revenue” must be dedicated to the Dulles Corridor rail project. (The term, “existing surplus net revenue” refers to revenue remaining after payment of toll road operating and debt service obligations.) Moreover, the Board committed to adjust toll rates in the future as necessary to raise sufficient revenue to fund the capital cost of the rail project.

Sources: Metropolitan Washington Airports Authority; Commonwealth of Virginia Transportation Board

*Applicability to Montgomery County:* The County could establish a type of transportation improvement district through creation of a special taxing district or an impact tax district. Maryland law permits the County to establish special taxing districts for the purpose of assessing a property tax to support any function allowed under its home rule authority.<sup>7</sup> However, revenue from special taxing district property taxes would be subject to the Charter limit on property tax revenue. The State also permits the County to assess impact taxes on new development.<sup>8</sup> Impact tax revenue would not be subject to the Charter limit. (In contrast to the case study from Fairfax, the County does not have authority to charge roadway tolls as detailed on page 50).

### 3. Other Dedicated Tax and Fee Revenue

While sales and property taxes are the most common dedicated revenue source for transit systems, some jurisdictions set aside revenue from other types of taxes and fees to support transit. Examples of these dedicated revenue sources include:

- As noted above, the State of Virginia has dedicated a portion of revenue from the Dulles Toll Road to support the construction of a transit line in the Tysons-Dulles corridor.
- The Metropolitan Transit Authority (New York) receives dedicated revenue from automobile registration fees.

<sup>7</sup> Annotated Code of Maryland Article 25A, §5(O).

<sup>8</sup> State law as codified in MCC § 52-17.

- The Southeast Pennsylvania Transit Authority (SEPTA) receives dedicated revenue from automobile leasing and rental fees.
- All revenue from the London, England, “congestion charging” program is required by law to be invested in improving Greater London bus operations (see page 62).
- The City of Redmond, Washington imposes a “Business Tax/Transportation Improvement” (BTTI) tax on employers to fund transportation improvements including transit programs (see case study below).

**Case Study: Per Employee Transportation Tax  
Redmond, Washington**

The City of Redmond, Washington funds its transportation demand management program through revenue raised by a “Business Tax/Transportation Improvement (BTTI)” tax. Redmond levies the BTTI as a per employee tax on all employers in the City. The current BTTI rate is \$55 per employee per year.

BTTI revenue funds a variety of transportation improvements including roadway capital projects and programs to encourage alternatives to the single-occupant automobile. About ten percent of BTTI revenue support commuting alternatives. For example, BTTI funds have been used to:

- Administer the city’s transportation demand management program;
- Fund transit and ridesharing incentives and rewards;
- Fund the operation of a shuttle bus service;
- Operate parking management programs; and
- Fund the construction of a “bike station” at a transit center.

The City first imposed the tax in 1997 as a temporary four-year measure. In 2001, with the support of the business community, Redmond established the BTTI as an on-going revenue stream. BTTI revenue is directed to a special fund dedicated exclusively for transportation related projects.

Source: City of Redmond, Washington

*Applicability to Montgomery County:* Maryland law prohibits the County from raising revenue from roadway tolls, automobile registration fees, or taxes on car rentals.<sup>9</sup>

The County Code allows the County to charge a “transportation management” fee on optional method developments in an established transportation management district (TMD).<sup>10</sup> The County currently funds TMD activities and programs in part from revenue raised by the transportation management fee. The Code permits the County to use transportation

<sup>9</sup> Sources: Annotated Code of Maryland, Transportation Article, §25-101(b)(1) and (2).

<sup>10</sup> MCC § 42A-29.

management fee revenue for a variety of additional purposes including adopting traffic and parking control measures, providing transportation-related capital projects, and creating public-private programs to increase ridesharing and transit use.<sup>11</sup>

#### 4. Parking Space Tax

In Australia and Canada, several municipalities have implemented special taxes on non-residential parking spaces. The goal of this type of tax is to create an economic disincentive for driving alone and, in some cases, to raise revenue for transportation projects. This taxing strategy also encourages developers and property owners to reduce the number of parking spaces constructed or made available for use.

Communities levy parking space taxes based either on the number of parking spaces or the size of the parking area at a property. Some communities limit the imposition of this tax to free or subsidized parking spaces and facilities. Implementation of a tax on parking spaces requires the municipality to maintain an accurate inventory of surface and in-structure parking spaces in local land records.

##### **Case Study: Parking Space Taxes Sydney, Melbourne, and Perth, Australia**

Three Australian cities tax non-residential parking in urban areas.

- Sydney charges a parking space levy for each privately owned non-residential off-street parking space. The annual levy is \$800 Australian dollars (US\$660 ) per space in the central business district and \$400 (US\$330) per space in other business districts. Revenue from the parking space levy is dedicated to fund transportation capital projects.
- Melbourne charges a “long stay car park levy” for long-term and leased parking spaces in commercial facilities in the central business district. This levy is intended to encourage parking facilities to convert long-term spaces used by commuters into short-term spaces used by shoppers and visitors. The annual levy is \$800 (US\$660) per space.
- Perth charges a “parking license fee” for commercial parking spaces in the central business district. The fee varies depending on the type of space (short- or long-term) and the number of days the space is actually used. The annual fee is \$169 (US\$140) for short-term parking and \$195 (US\$160) for long-term parking.

Source: Todd Litman, *Parking Taxes: Evaluating Options and Impacts*, Victoria Transport Policy Institute, 2006

<sup>11</sup> MCC § 42A-29 and 42A-23(b).

*Applicability to Montgomery County:* In 1990, Senior Legislative Attorney Michael Faden wrote a memorandum concluding that the Council has the authority to enact an excise tax on parking spaces. That same year, the Council approved an excise tax on non-residential parking spaces. However, County Executive Kramer vetoed the legislation and the parking space tax never took effect.

In October 2007, the Working Group on Infrastructure Financing for County Government Facilities issued a report that, among other things, recommended that the County enact an excise tax on non-residential commuter parking spaces.

## **5. Revenue from Market Rate Public Parking**

It is extremely uncommon for public parking revenue to support transit or transportation demand management. Montgomery County stands out as one of the few communities that use parking revenue to fund transportation demand management programs.

Most commonly, public parking prices are set at a uniform (and often below market) rates throughout a parking district. Surplus parking revenue in most communities feeds into the general fund or support the activities of a business improvement district (similar to an urban district in Montgomery County). Some communities (such as San Francisco and Pasadena, California) have implemented market rate pricing by charging higher hourly rates for parking spaces in the greatest demand and lower rates for less attractive spaces. However, even in communities with market rate parking fees, rates are set so as to maintain an adequate supply of available spaces throughout the day rather than to raise revenue for transit or to create a financial disincentive to drive.

One noteworthy exception in public parking rate setting and revenue policy has been put in place by the University of Washington at its Seattle campus. When it implemented a comprehensive transportation demand management program in 1991, the University raised single-occupant vehicle parking rates by 50 percent. Single-occupant vehicle drivers pay parking fees that are significantly higher than both transit fares and parking costs for carpool drivers. At present, full day parking for a single-occupancy vehicle at a University parking facility is \$12.00.

Parking fee revenue supports a range of transit and transportation demand management activities known as the “U-Pass” program (see page 68). Parking revenue contributes about one-third of the operating costs of the U-Pass program.<sup>12</sup>

*Applicability to Montgomery County:* The County Code does not indicate any particular method or basis for setting parking rates. Rather, the Council sets public parking rates by resolution based on whatever criteria it sees fit. Under all pricing strategies, the County has an obligation to raise sufficient funds to cover PLD operating costs and to repay facility revenue bonds. Otherwise, the Council has the prerogative to keep rates low to minimize the cost to drivers or to set the rates high to serve as a disincentive to driving.

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<sup>12</sup> U-Pass 2007 Annual Report, University of Washington Office of Commuter Services

The County Code limits the use of Parking Lot District revenue to certain purposes; these include the construction, maintenance, and operation of parking facilities; funding urban districts and transportation management districts; and implementing transit and ridesharing incentive programs. An amendment to County law would be necessary to allow Parking Lot District revenue to directly fund transit system operating and capital costs.

## B. Economic Incentives

As discussed in Chapter II, the relative cost of driving versus alternative transportation modes is an important factor in determining individual commuter choices. Economic incentives are a proven means of convincing some commuters to switch to transit or other alternative modes. As detailed in Chapter III, the County reimburses some employers for a portion of the cost of transit subsidies offered to employees.

### 1. Employer-Based Transit Benefits (“EcoPass” Programs)

The most common form of transit benefit is a direct contribution from an employer to individual employees who ride transit regularly (an “employee-based” benefit). In contrast, in an “employer-based” approach, a transit agency uses an employer as an intermediary to provide transit benefits to all employees of an organization as a group. Under an employer-based program, a transit agency sells an employer passes for all of its employees to ride public transit for free.

Traditional transit agency pricing for individual monthly and annual passes assumes that users will ride transit almost daily. Under employer-based programs, a transit agency can price passes at a highly discounted rate because an employer pays for all employees regardless of how often they ride transit. Table 6-2 shows a hypothetical example comparing the costs of transit benefit that is employee-based with a transit benefit that is employer-based. The example assumes an organization of 100 employees (consisting of 80 single-occupant vehicle commuters and 20 transit commuters).

**Table 6-2: Cost Comparison Example:  
Per Employee Transit Benefit versus Employer-Based Transit Pass**

<b>Assumptions:</b> Number of Employees: 100 Number of Regular Transit Commuters: 20		
	Per Employee Benefit	Employer-Based Pass
Annual per User Cost Paid by Employer	\$300	\$60
Number of Employees Receiving Benefit	20	100
Total Annual Cost to Employer	$300 \times 20 = \$6,000$	$60 \times 100 = \$6,000$
Total Revenue to Transit Agency	\$6,000	\$6,000

This example shows an employer-based transit pass pricing program can be cost neutral for the transit agency and the employer, and yield increased benefits for some employees. All regular transit commuters retain their full transit benefit under employer-based pricing. However, under this pricing model, employees who have the ability to take the bus or train on occasion can ride transit at no cost on days that they do not need to drive.

Transit systems in the Dallas, Denver/Boulder, Portland, Salt Lake City, San Jose, and Seattle areas offer employer-based transit passes. These programs, known as “EcoPass” programs, have increased transit usage by offering all employees – particularly commuters who do not need to drive every day – an incentive to ride transit on occasion. A study of EcoPass programs found that employer-based transit benefits reduce commuter parking demand by as much as 19 percent.<sup>13</sup>

**Case Study: Employer-Based Transit Benefits  
Regional Transportation District (Denver/Boulder)**

The Regional Transportation District (RTD) serving the Denver and Boulder, Colorado area provides employer-based transit passes. RTD sells employers EcoPasses that enable all employees to ride transit for a year at no cost. In addition, employers who participate in the EcoPass program also make their employees eligible for a free guaranteed ride home in case of an emergency. The City of Boulder also arranges discounts at local merchants for EcoPass-eligible employees of businesses in the City.

RTD sets EcoPass prices based on two factors: the location of the employer and the number of employees. For 2008, the lowest annual EcoPass charge is \$38 per employee for employers with 2000 or more employees located in outer suburbs with limited transit service. The highest annual EcoPass charge is \$344 per employee for employers with 20 or fewer employees located near the airport. In contrast, purchasing monthly RTD passes would cost \$1,584 per year.

Last year, almost 1.1 million employees received the RTD EcoPass benefit. These employees made about 9.8 million transit boardings during the year.

Source: Regional Transportation District

*Applicability to Montgomery County:* The County could incorporate employer-based transit passes as a component of Ride On system pricing. However, Ride On is only one element of the County’s transit network. Employer-based transit passes likely would be most successful if the passes were accepted by all transit providers. WMATA would have to approve this type of pricing for the Metro system while the State would have to approve it for MARC.

<sup>13</sup> Donald C. Shoup, *Eco Passes: An Evaluation of Employer-Based Transit Programs*, Department of Urban Planning, University of California, Los Angeles, 2004.

## 2. Parking Parity

Many employers offer free or below market-rate parking as an employee benefit. As described in Chapter II, free or low-cost parking serves as an incentive for commuters to drive to work alone. The term “parking parity” refers to efforts to offer other benefits as an alternative to free or low-cost parking. Parking parity seeks to establish equity between benefits provided drivers and benefits provided employees who choose alternative commuting modes. In the case study that follows, the State of California requires many employers that provide parking subsidies to their employees to concurrently offer a cash allowance as an alternative to the parking subsidy.

### Case Study: Parking Cash-Out Program State of California

In 1992, the California legislature created a “parking cash-out” program that requires some employers to offer employees the option to choose cash in lieu of a parking subsidy. For the purpose of the cash-out law, the term “parking subsidy” means the difference between the out-of-pocket amount paid by an employer to secure an employee parking space and the price, if any, charged to an employee for use of that space. Employees that commute by transit, carpool, or vanpool and telecommuters, walkers, and bikers are eligible for the parking cash-out if a subsidized parking space for a single-occupancy vehicle is available to them.

The California “Parking Cash-Out Program” only applies to employers with 50 or more employees in designated air quality non-attainment areas. The law does not apply to employer-owned parking spaces.

A study reviewing the effects of the California cash-out requirement found that the program reduced the number of commuters who drove alone by 17 percent; increased carpooling by 64 percent; and increased transit ridership by 50 percent. All told, the shift in commuter choices resulting from the cash-out program reduced total vehicle miles traveled by employees by 12 percent.<sup>14</sup>

Source: California Environmental Protection Agency Air Resources Board

*Applicability to Montgomery County:* The County encourages employers to voluntarily provide alternative benefits to commuters who decline a free or reduced price parking space. The County could mandate a cash-out program similar to the one in California under its general police powers authority. However, as the County does not have a large supply of private commercial parking facilities, a cash-out mandate that applied solely to commercial parking benefits likely would have limited impact on trip generation.

<sup>14</sup> Donald C. Shoup, *Evaluating the Effects of Parking Cash Out: Eight Case Studies*, Department of Urban Planning, University of California, Los Angeles, 1997.



### 3. Employer/Commuter Rewards Programs

Economic incentives may be used to entice employers to promote and support alternative commuting modes. Through the Fare Share and Super Fare Share programs, Montgomery County covers a portion of employer transit subsidy costs for up to nine years. Other communities offer employers performance-based incentives for trip reduction. For example, the City of Redmond, Washington, has piloted a program to provide businesses a \$300 per year reward for each commuter trip reduced below an initial baseline level.

In some jurisdictions, community organizations provide direct monetary incentives to commuters who choose not to drive alone. These programs offer rewards for first switching to – as well as for continuing to use – an alternative commuting mode. These rewards are separate from transit subsidies and other benefits offered by an employer.

#### Case Study: Commuter Rewards

##### Cumberland Community Improvement District (Suburban Atlanta)

The Cumberland Community Improvement District (CID) is a public-private partnership charged with improving transportation access to a commercial area northwest of Atlanta known as Cumberland Galleria. In addition to working to finance roadway and infrastructure improvements, the District also manages the Cumberland “Commuter Club” that provides support and assistance to promote transit use, carpooling, vanpooling, and telework.

Among other services, the Commuter Club offers a commuter rewards program. The rewards program offers several incentives for commuters to give up driving alone in favor of transit, ridesharing, and telework. New program participants earn \$3 per day for three months for taking an alternative transportation mode. Carpoolers receive free monthly gas cards (\$40 per month for three person carpools and \$60 per month for four-person carpools). All Commuter Club participants are eligible for drawings for gift cards of \$25 or more. Funding for the rewards comes from a commercial property tax that pays for all activities of the Cumberland CID.

Source: Cumberland Community Improvement District

*Applicability to Montgomery County:* The County already provides funding to offset some employer transit subsidy costs. Commuter or employer reward programs are another way to incentivize alternatives to driving alone. Of course, the success of these programs is dependent on the availability of resources to fund rewards that are large enough to affect commuter and business behavior.

### 4. Enhancement of Federal and State Incentive Programs

Many County employers offer transit subsidies to their employees. For 2008, the Internal Revenue Service allows employers to provide workers with up to \$115 per month in tax-free transit and vanpool benefits.<sup>15</sup> Any transit subsidy above \$115 per month is considered taxable income under Federal law. Assuming 20 work days per month, the maximum tax-free subsidy of \$115 per month equates to \$5.75 per day benefit. As shown in Table 6-3, this subsidy amount covers only a portion of daily transit commuting costs for some County residents.

<sup>15</sup> The U.S. Internal Revenue Service announced that it will increase the limit on non-taxable transit benefits to \$120 per month in January 2009.

**Table 6-3: Two Examples of Total Daily Metrorail Commuting Costs**  
(assumes 20 work days per month)

	<b>Glenmont to Silver Spring</b>	<b>Shady Grove to Bethesda</b>
Metro Station Parking	\$4.75	\$4.75
Round-Trip Metrorail Fare (Peak Hour)	\$4.30	\$6.90
Total Daily Commuting Cost	\$9.05	\$11.65
<b>Percent of Daily Commuting Cost Covered by Maximum Subsidy</b>	<b>64%</b>	<b>49%</b>

Source: WMATA

The financial “bailout” bill approved by Congress and signed by the President in October included a new Federal benefit for bicycle commuters. Beginning in January 2009, employees who use a bicycle as their primary commuting vehicle will be eligible for a \$20-a-month, tax-free reimbursement from their employers for bicycle-related expenses. Employers will be able to deduct the reimbursement expense from their Federal taxes.

The State of Maryland offers an income tax credit to employers who provide benefits that support alternative modes of commuting. Employers are eligible to receive a tax credit for 50 percent of the cost of providing transit and vanpooling subsidies, guaranteed ride home programs, and cash benefits in lieu of parking. The maximum tax credit is \$50 per participating employee per month. DOT reports that many eligible employers do not take advantage of this tax credit.

*Applicability to Montgomery County:* The County could team with transit advocacy groups and other local and state governments to persuade Congress to raise the maximum tax-free transit benefit amount. Similarly, the County could work with other Maryland counties to push for expansion of the State tax credit.

### **C. Driving Disincentives**

Many commuters find that traveling alone in their car has a cost, time, and convenience advantage over transit and other alternative modes. Several communities have adopted strategies to make driving alone less attractive than other commuting options. Limiting the supply of parking in urban centers is a commonly used measure to discourage driving.

The County Code authorizes DOT to regulate or limit public parking as a means of managing transportation demand within TMDs.<sup>16</sup> In practice, however, the County has not used its authority to limit public parking. Moreover, County Zoning Ordinance requires private developers to provide significant amounts of parking in urban centers.

<sup>16</sup> MCC § 42A-23(b)(a).

## 1. Zoning Code Parking Requirements

The most common type of parking standard in local zoning codes is the establishment of minimum parking requirements for different land uses. Zoning codes mandate a minimum number of parking spaces that must be provided for each specific land use type based on a measure of the intensity of use (gross floor area, number of bedrooms, number of employees, seating capacity, etc.). Typically, communities base minimum parking requirements on parking generation studies that estimate peak parking occupancy rates for different types of land use. Montgomery County has adopted this minimum parking requirement approach in its Zoning Ordinance.

In recent years, some urban planners have begun to question the soundness of demanding minimum parking requirements, particularly in urbanized areas served by transit. Most notably, these critics contend that transportation engineers and planners do not consider the price of parking and the availability of transit as variables in estimating parking generation rates.<sup>17</sup> Several jurisdictions have adopted separate parking requirements designed specifically for urban areas with relatively high levels of transit service and traffic congestion.

Variable Minimum Parking Requirements: Many communities adjust minimum parking requirements for certain geographic areas. Communities that have adopted variable minimum parking requirements take into account factors such as traffic congestion, transit availability, and parking supply in setting specific parking requirements. Most commonly, these communities establish lower minimum parking requirements in urban centers that are served well by transit.

The Montgomery County Zoning Ordinance allows for reduction of the minimum parking requirement for office buildings in close proximity to Metro stations.<sup>18</sup> In addition, the Ordinance allows for a parking reduction of 15 percent for office buildings in certain areas of the County that pay into the County's share-a-ride account to support ridesharing programs.<sup>19</sup>

Maximum Parking Limits: As an alternative to minimum parking requirements, some communities have established upper limits on parking supply. In these communities, the zoning code specifies the maximum amount of parking permitted at a specific site or within a specific district. Jurisdictions have applied maximum parking limits for both residential and non-residential development in high density areas served well by transit. Some communities set both minimum and maximum parking requirements, effectively establishing a range of parking spaces required in a development. In addition, some zoning code parking space limitations offer exemptions such as for short-term, shared, or paid parking spaces.

Portland, Oregon has created a system of transferable parking entitlements. Under this system, developers receive the right to build a maximum number of parking spaces at a property. A developer either may build the maximum allotment of spaces or may sell the entitlement for unbuilt spaces within a defined district.

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<sup>17</sup> Donald C. Shoup, *The Trouble with Minimum Parking Requirements*, Victoria Transport Policy Institute, 1999.

<sup>18</sup> MCC § 59-E-3.2

<sup>19</sup> MCC § 59-E-3.31

Table 6-4 shows examples of parking limits from the zoning ordinances of four communities.

**Table 6-4: Examples of Zoning Ordinance Maximum Parking Limits**

City	Area of City	Land Use	Parking Limit
Portland, Oregon	Northwest District	All Commercial	No more than 800 commercial parking spaces may be approved in the district <sup>20</sup>
Redmond, Washington	Commercial Districts	All Commercial	No less than four and no more than five parking spaces per 1000 square feet of gross floor area <sup>21</sup>
San Francisco, California	Downtown and Transit District Zones	Office	Parking area limited to no more than seven percent of total gross floor area <sup>22</sup>
		Residential	No more than one-quarter to one parking space per dwelling unit (depending on zone) <sup>7</sup>
Seattle, Washington	Stadium Transition Area Overlay District	All uses (unless excepted)	No more than one parking space per 650 square feet of gross floor area <sup>23</sup>

Some urban planners see a downside to the strategy of setting upper limits on parking. Once a building is built, it is often very difficult to add parking if needed, particularly in an urban environment. Critics of mandated parking limits also cite concerns that these restrictions negatively impact the marketability of a project and could jeopardize the developer's ability to secure financing.

*Applicability to Montgomery County:* The Council has the authority to amend parking requirements in the Zoning Ordinance. On November 25, 2008, the Council approved an amendment to the Transit Mixed Use (TMX) zone that reduced minimum parking requirements. The Council's Planning, Housing, and Economic Development (PHED) Committee has indicated that it plans to consider reducing minimum parking requirement or establishing maximum parking requirements in other high density zones.

The County has implemented a parking supply limit for one urban center. The approved Growth Policy sets a limit of 17,500 public and private long-term parking spaces that may be built in the Silver Spring CBD.

<sup>20</sup> City of Portland Zoning Code, 33.562.130.

<sup>21</sup> City of Redmond Municipal Code, 20D.130.10-020.

<sup>22</sup> City and County of San Francisco, Municipal Planning Code, § 151.1

<sup>23</sup> Seattle Municipal Code, 23.74.010 A.1.b.

## 2. Control of Public Parking Supply and Pricing

Some communities have created disincentives to driving alone through control of parking supply and pricing. The following four strategies use parking policy as a tool to change commuting practices:

Limiting Parking Supply: A community may constrain parking supply in areas well served by transit to compel a certain percentage of commuters to travel by means other than single occupant vehicle. Under this strategy, parking could be constrained by limiting the total number of available spaces or by converting long-term general use spaces to short-term or carpool spaces. As an example, Portland, Oregon, has placed a cap on the total number of parking spaces allowed in certain commercial areas (see pages 58-59).

Raising Parking Prices: A community may raise the cost of driving alone by charging higher parking rates. As mentioned above, the University of Washington raised parking prices by 50 percent at its Seattle campus when it implemented a comprehensive transportation demand management program in 1991.

Differentiated Parking Pricing – Time of Day: As discussed on the next page, the strategy known as “congestion pricing” charges an additional cost for commuting during peak traffic hours. For example, this approach could involve charging a premium for parking during certain hours or for entering or exiting a parking facility during peak congestion hours.

Differentiated Parking Pricing – Location: Some communities charge a premium for high demand parking spaces (such as those located closest to major employment or commercial centers). For example, Pasadena, California set lower hourly parking rates at the periphery of the commercial district than in the center of the district in order to deter price sensitive drivers from the highest demand locations.

Applicability to Montgomery County: As discussed in Chapter IV, the County established parking lot districts in Bethesda, Silver Spring, and Wheaton to provide property owners an alternative to meeting the on-site parking requirements of the Zoning Ordinance.<sup>24</sup> In addition the County manages on- and off-street parking meters in North Bethesda. Altogether, the County controls more than 21,000 parking spaces in urban centers.

By controlling a large number of parking spaces in urban centers, the County plays an important role in influencing commuter choices. County policies regarding parking supply and pricing affect the relative cost and convenience of driving alone compared to alternative modes. Currently, the County provides ample, relatively low cost parking in major urban centers.

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<sup>24</sup> The County also has established a parking lot district in the Montgomery Hills area. This report does not address Montgomery Hills as the area does not meet the criteria as an “urban center” as defined in Chapter III.

As detailed in Chapter IV:

- More than three-quarters of parking lot district spaces are available for long-term parkers;
- PLD-wide long-term parking vacancy rates range from 14 percent (in Bethesda) to 39 percent (in Silver Spring);
- Single-occupant vehicle parking rates are uniform in all PLD garages and lots;
- The hourly rate for long-term parking in PLDs (\$0.50/hour) is 33 percent lower than the hourly rate for short-term parking (\$0.75/hour); and
- In the Bethesda and Silver Spring PLDs, carpoolers receive a substantial parking discount.

The County could leverage its control of parking in urban centers to discourage commuters from driving alone. To achieve this end, the County could reduce the supply of long-term (non-carpool) parking, increase general rates for long-term parking, charge a premium for entering or exiting a parking facility during peak hours, and/or increase the rates for the highest demand parking spaces.

### **3. Limiting Commercial Parking Facilities**

An urban area with constrained parking supply cannot accommodate predominantly single-occupant vehicle commuters. As mentioned in Chapter IV, the County Zoning Ordinance allows commercial parking facilities as a permitted use for optional method developments in central business district zones. The County could limit the supply of commercial parking facilities in urban centers through zoning restrictions.

*Applicability to Montgomery County:* The Council could amend the Zoning Ordinance to limit the zones in which commercial parking facilities are permitted.

### **4. Congestion Pricing**

The term “congestion pricing” refers to a practice of adjusting transportation related charges (such as road tolls or parking fees) by time of day or by location. Congestion pricing creates an economic disincentive against adding traffic in the most congested areas of a city and/or the most congested periods of the day. Pricing models include:

- Imposing a new fee for use of a type of public facility that is free of charge in other locations or at other times of day; and,
- Charging a higher fee for use of a public facility than is charged in other locations or at other times of day.

Alternative methods exist for collecting congestion pricing fees. Drivers may pay a one-time entry fee at a toll booth or may purchase weekly, monthly, or annual passes. In addition, congestion fees may be assessed by means of a vehicle-mounted transponder that electronically charges a pre-existing account (similar to the “E-Z Pass” system). A municipality may charge congestion pricing fees at the entrance to different types of facilities, including:

- Major transportation facilities with a single point of entry (such as a bridge or tunnel toll station);
- Segments of the roadway network with multiple points of entry (such as entrances to a limited access highway);
- All roadways crossing a cordon surrounding a geographic area (such as a central business district or transportation corridor); and,
- Entrances or exits of public parking facilities.

Congestion pricing has been implemented in several cities outside the United States including London, Stockholm, and Singapore. Last year, the Federal Highway Administration awarded a grant to the City of San Francisco to study the feasibility of charging motorists a user fee to access specific areas of the City during peak periods of congestion. In contrast, earlier this year, the New York State Legislature defeated a proposal to impose an \$8 charge on private automobiles entering Manhattan (south of 60<sup>th</sup> Street) during peak hours.

<b>Case Study: Congestion Pricing London, England</b>
<p>London introduced a “congestion charging” program in the central city in 2003. Drivers of vehicles that cross into the “charging zone” must pay an eight pound (US\$12) charge. Taxis, emergency services vehicles, motorcycles, bicycles, and alternative energy vehicles are exempt from the charge. Residents of the central city pay a discounted fee for driving within or re-entering the charging zone.</p> <p>Drivers may purchase daily, weekly, monthly, or annual passes. The congestion charge is in effect weekdays from 7:00 am through 6:00 pm. London enforces the fee by means of street cameras that read vehicle license plates and feed that information into a database of paid users.</p> <p>Last fiscal year, the London congestion charging program raised 137 million pounds (US\$205 million). By law, all revenue from the congestion fees is directed to support bus operations in Greater London.</p>

Source: Transport for London

The creation of high-occupancy toll (HOT) lanes is another form of congestion pricing. In HOT lanes, carpools, vanpools, and buses travel for free, while drivers of single-occupant vehicles pay a toll. Several states currently have HOT lanes, including California, Colorado, Minnesota, and Texas.

*Applicability to Montgomery County:* Congestion pricing on roadways is a form of toll payment. Maryland law prohibits the County from imposing roadway tolls.<sup>25</sup> The State Highway Administration plans to charge higher toll rates on the Inter-County Connector during rush hour to encourage drivers to use the roadway at non-peak hours. The County could impose a congestion surcharge for drivers that enter or exit County operated parking facilities during peak hours.

## **5. Road Space Rationing**

Several large cities in other countries control peak period vehicle trips through a measure known as “road space rationing.” Large cities including Athens, Mexico City, and São Paulo limit the total number of vehicles permitted to enter the center city each day. Road space rationing is implemented by various methods. One method involves the distribution of a finite supply of daily entry passes to residents who can either use a daily pass or sell it to other commuters. Other road space rationing methods include limiting entry to the central city based on vehicle license plate number and the day of the week.

*Applicability to Montgomery County:* Road space rationing is an extreme measure used primarily in urban centers with significantly worse traffic congestion and air quality conditions than exist in Montgomery County. As County urban centers are all served by State highways, the County would require State approval to enforce road space rationing.

## **D. Location and Design of Transportation Network**

As mentioned in Chapter II, the physical layout of transportation facilities in an urban area may influence commuting choices. The design of transportation systems affect how people get to work. Some jurisdictions have altered their transportation networks to promote efficient commuting practices.

### **1. Remote Parking**

Remote parking is a land use strategy that locates parking on relatively inexpensive land at the periphery of a major destination such as a central business district. Remote parking intercepts drivers before they enter the more congested area at the center of the district, thereby reducing traffic where density is the greatest. Commuters are attracted to the remote parking either by low-priced parking rates or by limited supply of long-term parking in the district’s center. Frequent shuttle bus service transports parkers to their job site or other final destination.

Remote parking is a common strategy found at U.S. airports. At many airports, relatively low cost, long-term parking is located on the periphery of the airport property (or off-site) but is easily accessed via major transportation routes. Users of these parking facilities rely on frequent and reliable shuttle buses to complete their trip to the airport terminal.

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<sup>25</sup> Source: Annotated Code of Maryland, Transportation Article, §25-101(b)(2).



*Applicability to Montgomery County:* The County could adopt a remote parking strategy where land for new parking facilities is available. As the availability and cost of land is an important consideration, remote parking may be better suited to newly emerging urban centers than it would be as a “retrofit” to developed urban centers. In addition, to make remote parking a viable option for commuters, the County would need to set aside sufficient funding for frequent shuttle bus service between the parking facilities and the urban center.

## **2. Bus Rapid Transit**

The term “bus rapid transit” refers to a transit system that includes dedicated rights-of-way or roadway lanes used by frequent, high-capacity public commuter buses. In contrast to rail transit, bus rapid transit routing may be adjusted to respond to changes in land use patterns including shifts in employment and housing.

Bus rapid transit may run in:

- A dedicated right-of-way;
- A dedicated lane of an existing roadway;
- The median of an existing roadway; or
- A non-road right-of-way (such as a railroad right-of-way).

In some instances, bus rapid transit systems share rights-of-way or lanes with private buses, vanpools, carpools, and other high-occupancy vehicles.

Advanced bus rapid transit systems include features similar to rail transit systems including pre-paid fare collection, enclosed stations, and integrated fare systems that permit transfers between routes and modes. A report by the U.S. General Accountability Office notes that bus rapid transit systems often must deliver high levels of service and amenities similar to rail systems in order to overcome the poor public image of commuting by bus.<sup>26</sup>

To implement a bus rapid transit system, the transit provider will need to make significant investments in right-of-way acquisition or conversion, purchase and maintenance of vehicles, and construction and up-keep of facilities. Nonetheless, bus rapid transit often is more affordable to construct than light rail transit systems.<sup>27</sup> Construction and operation of bus rapid transit systems require the cooperative efforts of local planning agencies and transit service providers. As noted by the Victoria Transport Policy Institute, successful bus rapid transit requires that bus transit be given increased priority in transportation planning and budgeting, roadway management, and land use decision-making.<sup>28</sup>

Several metropolitan transit authorities have built bus rapid transit lines. Table 6-5, on the next page, shows information on bus rapid transit lines constructed in Boston, Cleveland, Las Vegas, Los Angeles, and Pittsburgh.

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<sup>26</sup> United States General Accounting Office, *Bus Rapid Transit Shows Promise*, GAO-01-984, September 2001

<sup>27</sup> Ibid.

<sup>28</sup> Victoria Transport Policy Institute, Online TDM Encyclopedia, <http://www.vtpi.org/index.php>, July 2008

**Table 6-5: Examples of Bus Rapid Transit Lines**

City/Route	Distance	Right-of-Way	Route
Boston/ “Silver Line”	7.0 miles	Dedicated bus lanes on arterial highways; downtown bus tunnel	From Roxbury to Downtown Boston and from South Boston to Logan Airport
Cleveland “Silver Line”	7.1 miles	Dedicated bus lane on median of arterial highway	Along Euclid Ave. from Downtown Cleveland to East Cleveland
Las Vegas/ “Max Line”	7.5 miles	Dedicated bus lane on arterial highway	Along Las Vegas Blvd. from Nellis Air Force Base to Downtown Las Vegas
Los Angeles “Purple Line”	14 miles	Bus lane in railroad right-of-way	From North Hollywood to Woodland Hills
Pittsburgh “MLK East Busway”	9.1 miles	Bus lane in railroad right-of-way	From Downtown Pittsburgh to eastern suburb of Swissvale

*Applicability to Montgomery County:* County master plans and other planning documents identify possible bus rapid transit rights-of-way including the Corridor Cities Transitway, the Purple Line, in the Georgia Avenue corridor, and along Veirs Mill Road. Construction and operation of bus rapid transit would require the County to identify significant new funding sources. As a point of reference, the seven-mile bus rapid transit line in Cleveland which is being built primarily in existing rights-of-way is estimated to cost about \$168 million to construct. The County also would require State approval if it chose to use State owned rights-of-way for bus rapid transit.

### **3. Transit Signal Priority / High Occupancy Vehicle Lanes**

Transit signal priority refers to a traffic management strategy that gives precedence to transit vehicles at signal controlled intersections. Transit signal priority allows public buses (as well as street-cars and light rail lines) to avoid many intersection delays, thereby increasing the reliability of transit schedules. By improving the reliability and reducing the time of travel by transit, signal prioritization makes transit a more competitive alternative to the single-occupant automobile. A traffic management system may also offer signal priority to certain non-transit vehicles such as vanpools, carpools, and emergency response vehicles.

A common method of transit signal prioritization is the installation of “queue jump” lanes. A queue jump lane is a short bus lane leading to a signalized intersection. When a transit bus approaches an intersection, a signal priority system provides an early green light to the bus that permits the vehicle to by-pass the intersection queue.

As detailed in a 2005 study funded by the U.S. Department of Transportation, a transit signal priority system requires four technological components:

- A detection system that identifies the location of transit vehicles;
- A priority request generator that alerts the traffic control system that a transit vehicle would like to receive priority;
- Software that processes the request and decides whether and how to grant priority based on priority control strategies; and
- Software that manages the system, collects data, and generates reports.<sup>29</sup>

Several communities have installed signal prioritization on dedicated transit or high-occupancy vehicle (HOV) lanes to maximize the efficiency of the roadway network. HOV lanes give priority to transit buses, vanpools, and carpools. In some communities, motorcycles and alternative fuel vehicles also are allowed access to HOV lanes. HOV lanes may be created at the construction of a new roadway or may be retrofitted into existing facilities by converting regular travel lanes to HOV lanes.

Multiple communities have instituted the use of transit signal prioritization including Chicago, Illinois; Fairfax County, Virginia; King County, Washington; Los Angeles, California; Portland, Oregon; and Tacoma, Washington. Evaluations of transit signal prioritization systems found that their effectiveness in reducing transit travel times varies depending on the level of congestion, the frequency of bus service, and the degree of prioritization the system gives both in intersections and on travel lanes. For example, signal prioritization in Tacoma, Washington resulted in a 40 percent reduction in transit vehicle intersection delays. In contrast, a study of transit signal prioritization in Fairfax County, Virginia found only minimal improvements in transit vehicle intersection delays during peak congestion periods (see case study on the next page).

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<sup>29</sup> Harriet R. Smith and Brendon Hemily, *Transit Signal Priority: A Planning and Implementation Handbook*, May 2005

### Case Study: Transit Signal Priority Fairfax, Virginia

Fairfax County has installed a transit signal priority system covering 25 intersections of Richmond Highway (Route 1). Buses travel the Richmond Highway corridor on lanes shared with other vehicles. Working with the Virginia Department of Transportation and WMATA, Fairfax installed a signalization system that extends a green light when a bus approaches an intersection during the last 10 seconds of the green phase. At present, the highway does not include any bus lanes or queue jump lanes.

The cost for procuring and installing prioritization technology at 25 intersections and 12 buses was approximately \$220,000. Fairfax originally installed the signal prioritization system to accommodate emergency vehicles. With financial assistance from the Metropolitan Washington Council of Governments, Fairfax expanded the signal prioritization system to include commuter buses including express buses traveling from Fort Belvoir to the Huntington and King Street Metrorail stations.

The Virginia Department of Transportation commissioned Virginia Tech to evaluate the impact of the transit prioritization system on transit travel times. The Virginia Tech study found the benefits of the program were highly dependent on the level of congestion. During periods of low to moderate levels of congestion, the system reduced intersection delays for transit vehicles by as much as 23 percent. However, during the most congested peak hours, the study found only a marginal improvement (about 2.5 percent) in transit travel times.

Sources: Smith and Hemily, *Transit Signal Priority: A Planning and Implementation Handbook*, May 2005; Hesham Rakha, Kyoungcho Ahn, and John Collura, *Transit Signal Priority Project Along Route 1: Lessons Learned*, April 2006

*Applicability to Montgomery County:* The Department of Transportation operates the County's Advanced Transportation Management System (ATMS). ATMS is a computer system designed to monitor and control traffic signals in real-time to reduce traffic congestion, travel time, and accidents. Several years ago, DOT conducted a limited demonstration of transit signal prioritization for Ride On buses. DOT found transit signal prioritization generally feasible but refrained from implementing the system pending completion of the current multi-year replacement of major ATMS technology. Transit signal prioritization is in the long-term scope of ATMS and could be accommodated by the next generation of ATMS technology. As State roads serve as the major commuting corridors to County urban centers, the County would require State approval to adjust signals and change lane configurations. WMATA approval would also be necessary to equip Metrobuses with signal prioritization technology.

The State of Maryland has dedicated certain lanes on I-270 for high occupancy vehicles during weekday rush hours.

## E. Centrally Managed System Governance

In most metropolitan areas, a combination of entities governs transportation demand management programs. State and local governments, regional organizations, transit systems, and parking authorities often provide different transportation demand services. In many cases, these services are loosely connected and not comprehensively managed.

Some communities in the country, most notably universities, have developed transportation demand systems that consolidate a wide range of services into one centrally-managed program. In these consolidated programs, a single entity promotes alternative commuting modes, offers transit incentives, operates local shuttle services, and sets parking pricing and supply policies. For example, the University of Washington “U-Pass” program provides a package of transportation services for faculty, staff, and students that includes free transit, a free campus shuttle, and discounts for vanpooling, carpooling, bicycling, and car-sharing (see case study below).

### **Case Study: U-Pass Program University of Washington**

The University of Washington U-Pass program is a consolidated transportation demand system that offers a wide range of services. Commuters pay a quarterly user fee to join the U-Pass program. For \$70 per quarter (\$50 for students), U-Pass members receive a range of benefits including:

- Unlimited free rides on public bus and train systems in the Seattle region;
- Discounted vanpool fares;
- Discounted carpool parking;
- Discounted parking for commuters who drive two days per week or less;
- Free nighttime van service serving the campus and nearby neighborhoods;
- Ridesharing matching programs;
- Free guaranteed emergency ride home;
- Discounted car sharing (“Zipcar”) services;
- Discounts on the purchase of bicycle helmets, lights, parts, and accessories; and
- Discounts on general purchases at over 40 local and national merchants.

Program users and single-occupant drivers furnish nearly all of U-Pass operating resources. The University sets parking prices at a rate high enough to create an incentive for some commuters to convert to alternative modes but low enough to attract sufficient customers to generate desired revenue. As mentioned above, parking fees and fines supplied 33 percent of program operating costs in 2007. Membership fees contributed about 59 percent of the operating revenue for the U-Pass program. Other University sources provided the remaining 8 percent of operating resources.<sup>30</sup>

In the 18 years since the inception of the U-Pass program, the employee and student population in the University District of Seattle has grown by 24 percent. During the same period, the number of peak hour trips to the area decreased by more than 10 percent. Currently, more than three-quarters of the campus population commutes by a method other than driving alone.

Source: University of Washington

<sup>30</sup> U-Pass 2007 Annual Report, University of Washington Office of Commuter Services

*Applicability to Montgomery County:* Governance of transportation demand management in Montgomery County is decentralized and shared among multiple County and non-County entities. The County could establish a new transportation demand management governance structure that oversees policies relating to transit financing, commuting incentive programs, infrastructure development and maintenance, zoning and land use requirements, parking policy, and other County policies, programs, and factors that influence commuting patterns.

The County has entered into an agreement with Montgomery College to provide a transit benefit to students enrolled in the College. Under the County's "U-Pass" program, Montgomery College students ride for free on Ride On buses by showing a current student identification card. The College pays the County \$550,000 annually for this benefit.

## CHAPTER VII: FINDINGS

The report responds to the Council's request for the Office of Legislative Oversight (OLO) to study transportation demand management in Montgomery County and other communities. "Transportation demand management" refers to a set of public policy strategies and programs aimed at increasing the efficiency of a region's transportation resources by providing convenient and affordable alternatives to the single-occupant vehicle.

This chapter summarizes OLO's findings about the implementation, funding, and governance of transportation demand management strategies in three subject areas:

- A. General Findings about Transportation Demand Management
- B. Montgomery County's Approach to Transportation Demand Management
- C. Funding for Transit and Transportation Demand Management
- D. Transportation Demand Management Strategies in Other Communities

### A. GENERAL FINDINGS ABOUT TRANSPORTATION DEMAND MANAGEMENT

Transportation demand management programs are designed to change individuals' travel behavior by providing convenient and affordable alternatives to the single-occupant vehicle. Findings #1 through #3 discuss factors that influence a commuter's travel choices. These transportation demand management concepts apply in Montgomery County as well as in other urban communities.

#### **Finding #1: In choosing how to travel, commuters weigh the relative cost, time, and convenience of driving alone against alternative modes of travel.**

Commuters to urban centers can choose to drive alone or take an alternative transportation mode (e.g., bus, rail, or carpool). Interviews with transportation demand management professionals and a review of the literature indicate that three dominant factors influence an individual's commuting choices:

- **Cost** – the relative expense of commuting by alternative modes;
- **Time** – the time needed to commute by one mode compared to another; and
- **Convenience** – the ease, comfort, and reliability of commuting by alternative modes.

#### **Finding #2: A range of conditions influence the cost, time, and convenience of commuting. Only some of these conditions fall within the County's influence or control.**

County land use decisions, transit programs, parking policies, and other actions affect the relative cost, time, and convenience of commuting patterns. For example:

- The County's Zoning Ordinance establishes minimum parking requirements that determine the supply of parking in new developments.

- The County's Ride On Bus system operates 77 peak hour routes; this network includes 37 routes that serve the Bethesda, Friendship Heights, North Bethesda, Silver Spring, and Wheaton urban centers.
- The County controls much of the parking supply in Bethesda, Silver Spring, and Wheaton. The County establishes the pricing structure for this supply and determines the mix of parking space uses (such as the number of spaces designated for short-term, long-term, and carpool use).

Several factors that affect a commuter's travel choice are beyond the direct control of either County Government or County residents. External factors such as energy costs, housing market conditions, and workplace policies affect commuter decisions. Specifically:

- Rising fuel prices make transit, carpooling, and bicycling more cost competitive with driving alone.
- When housing costs spiked earlier this decade, many people who work in the County decided to live in distant communities, resulting in longer commutes and fewer options for alternative modes of travel.
- Employers that permit employees to work flexible schedules or to telework affect a reduction in peak hour commuting trips.

**Finding #3: Successfully increasing the percentage of commuters using alternative modes of travel generates a need for additional investment in transit, bikeway, and pedestrian infrastructure.**

Sufficient and reliable funding for transit and other alternative commuting modes is a necessary prerequisite to sustaining high mode shares (i.e., a high percentage of commuters using alternative modes of transportation). If transportation demand management techniques successfully persuade a large number of commuters to abandon driving alone, then cost competitive, timely, and convenient alternatives must be available to serve these commuters.

Transit systems in Montgomery County have experienced increased ridership in recent years. Recent data from Ride On demonstrates that buses during peak hours are regularly at capacity and have had to pass bus stops without picking up passengers due to lack of space. If ridership continues to increase, transit systems will not be able to accommodate this growth without adding new capacity.

Similarly, if a change in travel behavior leads to large increases in the number of people traveling to and within urban centers by bicycle or by foot, bikeway and pedestrian improvements may be needed. This would generate demand for more capital investment. A failure to fund capacity increases that keep pace with demand for alternative transportation modes could result in frustrated commuters choosing to return to driving alone.



## **B. MONTGOMERY COUNTY’S APPROACH TO TRANSPORTATION DEMAND MANAGEMENT**

The County has chosen to focus transportation demand management efforts on “urban centers,” defined in this report as areas with high concentrations of employment that are well served by transit.<sup>1</sup> Specifically, OLO studied North Bethesda and the Central Business Districts of Bethesda, Friendship Heights, Silver Spring, and Wheaton. Findings #4 through #11 address Montgomery County’s approach to transportation demand management governance and implementation in these urban centers and in the County as a whole.

### **Finding #4: Governance of transportation demand management in Montgomery County is decentralized and shaped by multiple County and non-County entities.**

Governance of transportation demand management in Montgomery County is decentralized and shared among multiple County and non-County entities. Within the County, the County Council, County Executive, Department of Transportation, and the Maryland-National Capital Park and Planning Commission (M-NCPPC) each have transportation demand management roles. For example:

- The County Council approves the operating and capital budgets that fund the County’s transportation demand management programs and transit operations and facilities. The Council also enacts laws, approves land use policies, and sets parking rates that affect transportation demand management.
- The County Executive sets transportation demand management policies and priorities in preparing and recommending an annual operating budget and biannual capital improvements program.
- The Department of Transportation implements County transportation policies, including operating Ride On, providing commuter services, and operating County parking facilities.
- M-NCPPC develops and recommends master plans and the Growth Policy. In addition, the Planning Department participates in drafting and enforcing traffic mitigation measures required by the Planning Board as part of the development approval process.

Since Montgomery County is part of a metropolitan region where transit services cross jurisdictional lines, the County must also work closely with the State of Maryland, District of Columbia, State of Virginia, the Washington Metropolitan Area Transit Authority (WMATA), Metropolitan Washington Council of Governments, and the Federal government to achieve County and regional transit goals.

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<sup>1</sup> As this report addresses TDM strategies implemented by the County Government, the report does not discuss Federal Government employment centers or urban centers located within municipalities.

**Finding #5: In addition to the roadway network, Montgomery County’s current transportation infrastructure includes rail and bus transit systems, bikeways, and pedestrian facilities.**

The County’s current alternative transportation infrastructure includes:

- The Metrorail, Metrobus, Ride On, MARC Train, and MTA Commuter Bus transit systems;
- A limited network of bikeways; and
- Pedestrian facilities (e.g., sidewalks and crosswalks) that improve mobility within urban centers.

Much of this infrastructure is focused on the County’s urban centers, specifically North Bethesda, and the Bethesda, Friendship Heights, Silver Spring, and Wheaton Central Business Districts.

*Transit Systems:* Table 7-1 lists the number of rail stations Countywide and in urban centers, and the parallel number of bus routes that provide service during peak commuting hours.

**Table 7-1: Summary of County Transit Network Peak Hour Service**

Area	Commuter Bus Routes	MARC Stations	Metrorail Stations	Metrobus Routes	Ride On Bus Routes
Countywide	3 routes	11 stations	12 stations	21 routes	77 routes
Urban Centers	3 routes	1 station	7 stations	20 routes	37 routes

*Bikeways:* Currently, three of the five urban centers (Bethesda, North Bethesda, and Silver Spring) are served by eight bikeways. The County’s Master Plan of Bikeways calls for a significant expansion of the current bikeway system. The plan includes a total of about 200 bikeways (500 miles) throughout the County, including 62 bikeways that serve urban centers. Since many of the planned bikeways are in State highway rights-of-way, the County would require State cooperation to build these facilities.

*Pedestrian Facilities:* The County’s pedestrian facilities include sidewalks, crosswalks, countdown crosswalk signals, and lighting. The County’s Department of Transportation maintains these facilities and installs upgrades. The master plans for North Bethesda and the Bethesda, Friendship Heights, and Silver Spring Central Business Districts also recommend pedestrian-friendly features such as wider sidewalks on busier streets, streetscaping, mid-block signals for pedestrian crossings, and restrictions on allowing drivers to turn right on red.

**Finding #6: The County actively promotes transit and other alternative commuting modes.**

The County's strategies for promoting transit and other alternative commuting modes include: requiring developers and employers to decrease commuter trips; providing County funding for transit subsidies; and offering general transit promotion programs.

*Developer and Employer Traffic Mitigation Measures:* County Code (Chapter 42A, Ridesharing and Transportation Management), requires certain developers and employers to implement traffic mitigation measures, such as limited parking, carpooling or vanpooling incentives, or transit subsidies.

*County Transit Subsidies:* The County's Fare Share program (offered Countywide) and Super Fare Share Program (offered in the County's transportation management districts<sup>2</sup>) provide financial assistance to employers who offer transit subsidies to their employees.

*DOT Outreach and Programs:* The Commuter Services Section in the Department of Transportation's Division of Transit Services implements Countywide outreach and programs, including:

- Marketing alternate transportation options to workers and residents in the County, with a focus on transportation management districts;
- Encouraging employers to promote alternate transportation options for their workers;
- Promoting and implementing programs such as Fare Share and Super Fare Share;
- Providing personalized rideshare matching for carpools and vanpools; and
- Overseeing the County's transportation management districts.

*Share-a-Ride Districts:* In a share-a-ride district, an office development may obtain a reduction in its minimum parking requirements if the property owner participates in a County-operated share-a-ride program, provides ridesharing incentives, and pays an annual fee to the County's ridesharing account (part of the Mass Transit Fund) to support transportation demand management activities.

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<sup>2</sup> See Chapter 3 for a complete description of transportation management districts.

**Finding #7: The County Government focuses transportation demand management programs and resources on urban centers.**

The Department of Transportation engages in transportation demand management activities throughout the County. However, County policies and practices focus transportation demand management programs and resources on certain urban centers.

County Code Chapter 42A, Ridesharing and Transportation Management, states that the County desires to “focus new development in high transit-service areas” but that “limited transportation infrastructure, traffic congestion, pedestrian access, and safety issues impede the County’s land use and economic development objectives.”<sup>3</sup> As such, the Code authorizes the Council to establish transportation management districts to:

- “Provide sufficient transportation capacity to achieve County land use objectives and permit further economic development;
- Reduce the demand for road capacity, and promote traffic safety and pedestrian access; and
- Help reduce vehicular emissions, energy consumption, and noise levels.”<sup>4</sup>

The Council has established transportation management districts (TMDs) in North Bethesda, downtown Bethesda, Friendship Heights, Silver Spring, and Shady Grove. The Shady Grove TMD, although established in 2006, remains unfunded and inactive.

In addition to the transportation management districts, DOT has designated the Wheaton CBD as a “Transportation Planning and Policy Area” and dedicates additional resources to this area for transportation demand management activities.

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<sup>3</sup> MCC §42A-22 (a) and (b).

<sup>4</sup> MCC §42A-22 (c).

**Finding #8: The County's approach to managing and financing transportation demand management activities varies among urban centers.**

Table 7-2 shows how the County manages and funds transportation demand management differently in each of the five urban centers. Differences among the urban centers reflect the uniqueness of each area, diverse constituent interests, and different practices that existed when the transportation management district or transportation planning and policy area was established.

**Table 7-2: Comparison of County Transportation Management Districts and the Wheaton Transportation Planning and Policy Area**

	<b>North Bethesda</b>	<b>Bethesda</b>	<b>Friendship Heights</b>	<b>Silver Spring</b>	<b>Wheaton TPPA</b>
<b>Date Established</b>	1995	1998	1999	1987	1993
<b>Management</b>					
<b>Manager</b>	Transportation Action Partnership	Bethesda Urban Partnership	Department of Transportation	Department of Transportation	Department of Transportation
<b>Advisory Committee</b>	12-18 voting members	11 voting members	14 voting members	12 voting members	None
<b>Appointment of Committee Members</b>	Transportation Action Partnership	Bethesda Urban Partnership	Executive appoints, Council confirms	Executive appoints, Council confirms	Not applicable
<b>Public Parking</b>					
<b>Number of County Spaces</b>	1,089	7,501	0	12,066	1,464
<b>Parking Lot District</b>	No	Yes	No	Yes	Yes
<b>FY08 Funding Sources</b>					
<b>Parking Revenue</b>	✓	✓		*	✓
<b>TMD Fees</b>	✓	✓	✓	**	N/A
<b>Mass Transit Fund</b>			✓	✓	✓

\*While no Silver Spring parking revenue was transferred to the Silver Spring TMD in FY08, the FY09 budget assumes a transfer of about \$200,000 to support the Super Fare Share program in Silver Spring.

\*\*Fees are authorized but no developments required to pay have been completed. DOT expects to collect fees in FY09.

**Finding #9: The supply of spaces in County parking lot districts exceeds the current parking demand of single-occupant commuters.**

In the 1940s and 1950s, the County established parking lot districts (PLDs) in some urban centers to give property owners an alternative way to comply with the Zoning Ordinance's parking requirements. Today, County-managed PLDs provide more than 21,000 parking spaces located in the Bethesda, Silver Spring, and Wheaton Parking Lot Districts; more than three-quarters of these spaces are available to long-term, non-carpool parkers.

At present, although a few parking facilities fill during peak hours, the overall supply of parking in each district exceeds demand. Long-term parking vacancy rates, which vary by district, range from 39 percent (in Silver Spring) to 14 percent (in Bethesda).

**Finding #10: County parking policies work at cross purposes to County transportation demand management objectives.**

The County promotes alternative commuting modes while it simultaneously implements policies that provide single-occupant drivers easy access to parking. The presence of plentiful, low-cost, conveniently located parking, which serves as a strong incentive to driving alone, undercuts efforts to encourage commuters to choose alternative travel modes.

The following parking-related policies and practices promote single-occupant vehicle driving into the County's urban centers:

- Under current zoning regulations, the County requires developers in urban centers to provide nearly the same amount of parking (for similar uses) as is required in less densely built parts of the County that lack transit service. These minimum parking requirements were established when the County was more suburban in character and do not fully account for more urban conditions, such as the availability of transit and traffic congestion.
- The County's parking lot districts provide large supplies of long-term parking in three of the five urban centers. As explained in Finding #9, at present, although a few parking facilities fill during peak hours, the overall supply of parking in each district exceeds demand.
- Parking rates for public parking spaces in County facilities are relatively inexpensive, particularly compared to private parking rates. According to a recent DOT pricing survey, in Bethesda, a monthly parking pass at a County-owned facility costs \$95; the cost of a comparable pass at a commercial facility ranges between \$115 and \$165.

**Finding #11: Since the County controls a large share of urban center parking spaces, the County has an opportunity to use parking availability and pricing to influence commuters' travel choices.**

Since the County manages a large share of the parking supply in three urban centers, it plays an important role in influencing commuter travel choices. County policies regarding parking supply and pricing affect the relative cost and convenience of driving alone compared to alternative modes.

As reviewed earlier, the County currently provides ample, relatively low-cost, long-term parking in urban centers. However, the County could use its control of parking in urban centers to influence commuter choices. Examples of changes that can discourage commuters from driving alone include: reducing the supply of long-term parking; increasing general rates for long-term parking; charging a premium for entering or exiting a parking facility during peak hours; and/or increasing the rates for the highest demand parking spaces.

**C. FUNDING FOR TRANSIT AND TRANSPORTATION DEMAND MANAGEMENT**

Transportation infrastructure, including rail and bus systems, bikeways, and pedestrian facilities are funded through multiple County and non-County sources. Findings #12 and #13 describe major sources of transit and transportation demand management funding in Montgomery County.

**Finding #12: The State's Transportation Trust Fund and the County's Mass Transit Fund support transit and transportation demand management services.**

Two special transportation funds are major sources of funding for transit and transportation demand management services in Montgomery County.

*Maryland Transportation Trust Fund:* The Maryland Transportation Trust Fund supports the programs and activities of the Maryland Department of Transportation. The Fund finances Department operating, capital, and debt service expenses, including the State's contribution to WMATA and the operation of MTA Commuter Buses and MARC trains. State gas tax and motor vehicle taxes are the Fund's largest revenue sources. Although the Fund receives dedicated revenue, its resources are subject to annual budget appropriations and are not earmarked for specific programs such as transit.

*Montgomery County Mass Transit Fund:* The County's Mass Transit Fund supports operation of the Ride On bus system, transportation demand management programs, and other activities of the DOT Division of Transit Services. Mass Transit Property Tax revenue contributes about two-thirds of all Mass Transit Fund resources. Other large contributors to the Mass Transit Fund are State aid and Ride On fare revenue.

**Finding #13: Revenue from two special taxing districts supports County transportation demand management activities.**

The County's transportation management districts and parking lot districts each collect revenue that supports County transportation demand management activities.

*Transportation Management District Fee:* The County Code authorizes the County to charge a fee to certain property owners in transportation management districts (TMDs) to fund transportation demand management activities. The Code requires transportation management fee revenue to be used in the district in which the property subject to the fee is located. In FY08, the County collected \$1.3 million in transportation management district fee revenue.

*Parking Lot District Revenue:* The County Code establishes parking lot districts (PLDs) as special taxing districts. Within these districts, the County collects an annual ad valorem property tax from non-residential property owners who opt not to provide on-site parking. PLDs also receive revenue from parking fees, parking fines, and investment income. As shown in the Table 7-3, for each PLD, parking fees and special district taxes are the largest sources of revenue.

**Table 7-3: Estimated FY08 Parking Lot District Revenue**

Source of Revenue	Bethesda	Silver Spring	Wheaton
Special District Taxes	\$5,162,550	\$5,402,120	\$497,570
Parking Fees	\$8,745,000	\$7,804,610	\$725,000
Parking Fines	\$4,700,000	\$2,400,000	\$493,120
Investment Income	\$932,400	\$329,000	\$58,800
<b>Total Revenue</b>	<b>\$19,539,950</b>	<b>\$15,935,730</b>	<b>\$1,774,490</b>

Source: Approved FY09 Operating and Capital Budgets, Schedule C-3.

By law, PLD revenue must be spent within that PLD. The Code states that the primary purpose of PLD revenue is to acquire, build, restore, improve, maintain, and operate off-street parking facilities; the Code also authorizes the use of PLD revenue for:

1. Funding an urban district in the same PLD;
2. Supporting the activities of a transportation management district;
3. Implementing transit and ridesharing incentive programs; and
4. Establishing public-private partnerships to increase ridesharing and transit usage.



## **D. TRANSPORTATION DEMAND MANAGEMENT STRATEGIES IN OTHER COMMUNITIES**

OLO researched transportation demand management funding, policies, programs, and governance strategies used in other communities. Findings #14 through #18 discuss these strategies and their potential applicability to Montgomery County.

### **Finding #14: Most large transit systems in the country are funded in part by revenue from a dedicated funding source. State law limits the County's options for funding transit with a dedicated funding source.**

Most major transit systems in the United States receive a substantial portion of their capital and/or operating resources from a dedicated revenue source. Montgomery County would need to seek State approval to implement the most common strategies for dedicating a revenue source to fund transit services.<sup>5</sup>

*Sales Tax:* Sales tax revenue is the most common dedicated revenue source for transit systems in the country. Maryland law prohibits counties from imposing sales taxes. Legislation failed during the 2007 General Assembly session that would have dedicated a percent of State sales tax revenue for transit programs.

*Automobile Taxes and Fees:* Some jurisdictions dedicate revenue from gas taxes and automobile registration and licensing fees for transit programs. Maryland law prohibits counties from raising revenue from gas taxes or automobile fees. While the Maryland Transportation Trust Fund receives revenue from State gas taxes and automobile fees, transit must compete with other transportation programs through the annual appropriations process for these resources.

*Tolls:* Some jurisdictions dedicate roadway toll revenue for transit. Maryland law prohibits counties from raising toll revenue.

However, the County currently does have the authority to implement some of the transit funding strategies used in other communities.

*Transportation Improvement Districts:* "Transportation improvement districts" are special taxing districts designed to raise revenue for transportation improvements in a specific area. Property tax revenue in the Dulles Rail Transportation Improvement District helps fund the construction of the extension of Metrorail from West Falls Church to Dulles Airport.

Montgomery County has the authority to create a special taxing district to raise property tax revenue to support transit.

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<sup>5</sup> While the County's Mass Transit property tax is dedicated to funding transit programs, the tax rate has fluctuated significantly in recent years thereby reducing the stability of this revenue source.

Per Employee Tax: The City of Redmond, Washington charges employers a “Business Tax/Transportation Improvement” (BTTI) tax of \$55 per employee to fund transportation improvements including transit programs. The County has the authority to charge a similar fee.

Parking Space Tax: In Australia and Canada, several municipalities have implemented special taxes on non-residential parking spaces. These communities levy the tax based either on the number of parking spaces or the size of the parking area at a property.

Montgomery County has the authority to charge an excise tax on parking spaces. In 1990, the Council approved an excise tax on non-residential parking spaces; however, the County Executive vetoed the legislation. Last year, the Working Group on Infrastructure Financing for County Government Facilities issued a report that, among other things, recommended that the County enact an excise tax on non-residential commuter parking spaces.

Market Rate Public Parking: Some communities, most notably urban university campuses, set parking rates based on market demand and use the revenue to support a variety of transit-related programs.

As part of the annual budget process, the Executive recommends and the Council approves parking lot district (PLD) rates. PLD rates in some areas fall well below rates charged in privately-operated commercial facilities. Given the limits the Code places on use of PLD revenue, a Code amendment would be necessary to allow the use of this revenue for transit system operating and capital costs.

**Finding #15: The County could offer additional or alternative types of economic incentives to encourage commuters to switch to transit or other alternative modes.**

Economic incentives are a common tool to convince commuters to switch to transit or other alternative modes. The County’s Fare Share and Super Fare Share programs reimburse employers for a portion of the cost of providing employee transit subsidies. Elsewhere in the country, communities have developed additional types of alternative commuting economic incentives.

Employer-Based Transit Benefits: Transit systems in Dallas, Denver/Boulder, Portland, San Jose, and elsewhere offer employer-based transit passes. In these programs, the transit agency sells discounted transit passes for use by all workers in the organization. These programs offer all employees – particularly commuters who do not need to drive every day – an incentive to ride transit occasionally.

Montgomery County could incorporate employer-based transit passes as a component of Ride On system pricing but would need approval from WMATA and the State to extend the program to the Metro and MARC systems, respectively.

*Parking Parity:* “Parking parity” laws require an employer to offer cash benefits as an alternative to free or low-cost parking. California requires many employers that provide parking subsidies to concurrently offer a cash allowance as an alternative to the parking subsidy. The County encourages employers to voluntarily provide alternative benefits to commuters who decline a free or reduced price parking space.

Montgomery County could mandate a cash out program similar to the one in California under its general police powers authority.

*Employer/Commuter Rewards Programs:* Economic incentives may be used to entice employers to promote and support alternative commuting modes. Redmond, Washington, has piloted a program to provide businesses a \$300 per year reward for each commuter trip reduced below an initial baseline level. In other jurisdictions, community organizations provide direct monetary incentives to commuters who choose not to drive alone.

Montgomery County could supplement its existing transit subsidy reimbursement programs by providing financial rewards to employers who reach trip reduction goals or to commuters who use alternative modes.

**Finding #16: Some communities have put policies and programs in place to create a disincentive to driving alone.**

Many commuters find that traveling alone in their car has a cost, time, and convenience advantage over transit and other alternative modes. Several communities have adopted strategies to make driving alone less attractive than other commuting options.

*Zoning Code Parking Requirements:* Local zoning codes commonly set minimum parking requirements for different land uses. In recent years, some urban planners have critiqued minimum parking requirements because they frequently are based on studies that do not factor in the price of parking and the availability of transit. Some jurisdictions have adopted separate parking requirements designed specifically for urban areas with relatively high levels of transit service and traffic congestion. Alternatively, some communities set maximum limits on the amount of parking permitted at a specific site or within a specific district.

The County Council has the authority to amend parking requirements in the County’s Zoning Ordinance.

*Control of Public Parking Supply and Pricing:* Communities may create disincentives to driving alone through control of parking supply and pricing. A community may constrain parking supply to compel some commuters to travel by alternative modes. In addition, local governments may increase parking rates to raise the cost of driving alone.

Montgomery County has the authority to use public parking pricing to discourage commuters from driving alone.

*Congestion Pricing:* The term “congestion pricing” refers to a practice of adjusting transportation related charges (such as road tolls or parking fees) by time of day or by location.

Congestion pricing creates an economic disincentive for driving to the most congested areas of a city and/or during the most congested periods of the day. Congestion pricing has been implemented in several cities outside the United States including London, Stockholm, and Singapore. The creation of high-occupancy toll (HOT) lanes is another form of congestion pricing. In HOT lanes, carpools, vanpools, and buses travel for free, while drivers of single-occupant vehicles pay a toll.

Congestion pricing on roadways is a form of toll payment. State law prohibits Montgomery County from imposing roadway tolls. Nonetheless, the County could impose a surcharge for drivers that enter or exit County operated parking facilities during peak hours.

**Finding #17: Some communities employ land use and transportation network design to promote alternative commuting modes.**

The physical layout of an urban area may influence commuting choices. Land use patterns and the design of transportation networks affect how people get to work. Some jurisdictions have altered their land use patterns and transportation networks to promote efficient commuting practices.

Remote Parking: Remote parking is a land use strategy that locates parking at the periphery of a central business district to intercept drivers before they enter congested areas. Commuters are attracted to the remote parking either by low-priced parking rates or by limited supply of long-term parking in the district's center. Frequent shuttle bus service transports parkers to their job site or other final destination.

Montgomery County could adopt a remote parking strategy where land for new parking facilities is available. As the availability and cost of land is an important consideration, remote parking may be better suited to newly emerging urban centers than it would be as a "retrofit" to developed urban centers.

Bus Rapid Transit: The term "bus rapid transit" refers to a transit system that includes dedicated rights-of-way or roadway lanes used by frequent, high-capacity public commuter buses. Advanced systems (such as those built in Boston, Cleveland, and Las Vegas) include features similar to rail transit systems, such as pre-paid fare collection, enclosed stations, and integrated fare systems that permit transfers between routes and modes.

Montgomery County would require significant additional funding to construct and operate a bus rapid transit line(s) and would need State approval to use State rights-of-way.

***Transit Signal Priority:*** Transit signal priority refers to a traffic management strategy used by several jurisdictions that gives precedence to transit vehicles at signal controlled intersections. Transit signal priority allows public buses to avoid many intersection delays, thereby increasing the reliability of transit schedules. For example, upon approach of a transit bus to the intersection, a signal priority system provides an early green light to the bus permitting the vehicle to by-pass the intersection queue.

As State roads serve as the major commuting corridors to County urban centers, Montgomery County would require State approval to adjust signals and change lane configurations. WMATA approval would also be necessary to equip Metrobuses with signal prioritization technology.

**Finding #18: University campuses offer models of centralized administration of commuter services, transit incentives, shuttle bus operation, and parking supply and pricing policies.**

In most metropolitan areas, a combination of entities governs transportation demand programs. State and local governments, regional organizations, transit systems, and parking authorities often provide different transportation demand services. In many cases, these services are loosely connected and not comprehensively managed.

Some communities in the country, most notably universities, have developed transportation demand management systems that consolidate a wide range of services into one integrated, centrally-managed program. In these consolidated programs, a single entity promotes alternative commuting modes, offers transit incentives, operates local shuttle services, and sets parking pricing and supply policies.

Montgomery County could establish a new transportation demand management governance structure that oversees policies relating to transit financing, commuting incentive programs, infrastructure development and maintenance, zoning and land use requirements, parking policy, and other policies and programs that influence commuting patterns.

## **CHAPTER VIII: RECOMMENDATIONS**

Transportation demand management programs in urban centers are designed to change travel behavior by providing convenient and affordable alternatives to the single-occupant vehicle. As reviewed in the previous chapter, while the County actively promotes transit and other alternative commuting modes, some County policies work at cross purposes to these goals. This chapter offers four recommendations for Council action to improve the consistency and coherence of the County's transportation demand management policies and practices.

### **Recommendation #1: Establish parking policies that are consistent with the County's transportation demand management goals.**

County parking policies work at cross purposes to County transportation demand management objectives. Although the County actively promotes alternative commuting modes, it simultaneously offers single-occupant drivers easy access to parking in urban centers. OLO recommends the Council review and revise current parking policies to better align them with the transportation demand management goals established in approved master plans and the Growth Policy. The Council should examine two aspects of County parking policy.

#### **1.a. Establish a policy governing urban center parking requirements.**

The County Zoning Ordinance regulates the minimum number of parking spaces required for specific land uses. Current requirements only partially account for the availability of transit and traffic congestion in the County's urban centers. As a result, the County requires nearly the same amount of parking (for similar uses) in these urban centers as it requires in less densely developed areas that lack transit service.

In consultation with the Planning Board, the County Council should assess whether current Zoning Ordinance parking requirements are appropriate for urban centers served by transit. The Council should consider the following questions:

- Do the current Zoning Ordinance minimum parking reductions for proximity to Metrorail and share-a-ride participation adequately take into account current conditions in County urban centers?
- Should the Council amend the Zoning Ordinance to make parking reductions for developments served by Metrorail available to developments served by Metrobus and Ride On?
- Should the Council amend the Zoning Ordinance to replace minimum parking requirements with maximum parking requirements in urban centers served by transit?
- What should be the relationship between Zoning Ordinance parking requirements and master plan commuting goals?

**1.b. Establish a policy on public parking supply and pricing.**

The availability and cost of parking impacts the County's ability to achieve both transportation and economic development policy objectives in urban areas. On the one hand, plentiful, low-cost parking serves as an incentive for commuters to drive alone, while limited or high-cost parking provides an incentive to commute by alternative modes. On the other hand, businesses perceive limited or high-cost parking as detrimental to County economic and business development objectives.

In consultation with the Executive Branch, the County Council should adopt a policy resolution that establishes criteria for determining the supply and pricing of County-owned parking spaces. The policy should address the following questions:

- In parking lot districts, what formula should be used to determine how many parking spaces the County should build to accommodate current and future development? Should the County set a cap on the total number of parking spaces in a parking lot district?
- Should the County manipulate the mix of short-term, long-term, and carpool parking spaces in parking lot districts to encourage use of alternative commuting modes?
- Should the County raise long-term parking rates to encourage use of alternative commuting modes?
- Should the County impose a surcharge for drivers that enter or exit County-operated parking facilities during peak hours?
- Should the County charge a premium for high demand parking locations?

**Recommendation #2: Ask the Executive and the Planning Board to report annually on progress made toward achieving master plan commuting goals.**

Council-approved master plans establish County goals for the percentage of commuters who travel by a method other than single-occupancy vehicles. Master plans for many areas of the County (including most urban centers) include commuting goals. Realizing these goals requires an implementation plan that coordinates multiple County policies and programs including:

- Land use decisions;
- Transit services and policies;
- Transit promotion and subsidy programs;
- Zoning Ordinance parking requirements;
- Parking supply and pricing policies; and,
- Bicycle and pedestrian facility planning and implementation.

The Council is the sole entity with the authority to align all of these policies and programs. To properly oversee the County's progress in achieving its commuting goals, the Council requires periodic updates from the County Government and the Planning Board current modal split levels and the effectiveness of existing strategies designed to increase modal splits.

OLO recommends that the Council ask the Executive and the Planning Board to report annually on progress made toward achieving master plan commuting goals. In the report to the Council, the Executive and the Planning Board should identify whether new measures to achieve the commuting goals (such as increasing transit capacity or raising parking prices) are warranted. Based on the input from the Executive and Planning Board, the Council would determine whether any changes should be made to County transportation or land use policies and programs that affect commuting decisions.

**Recommendation #3: Ask the Executive to evaluate transportation demand management practices used in other jurisdictions and to report to the Council on their potential applicability in Montgomery County.**

While the County has implemented a broad series of measures to promote alternative commuting modes, some practices from other jurisdictions merit further evaluation to assess their potential viability in Montgomery County. The Council should ask the Executive to evaluate transportation demand management practices that could supplement the current array of County programs.

Specific items that OLO believes merit Executive review include:

- The feasibility of implementing an "EcoPass" or similar employer-based transit benefit program in the County or in all areas served by WMATA (see page 53);
- The implementation steps and funding needed to pilot transit signal prioritization for Ride On and Metrobuses on State and County roads (see page 65); and
- The effectiveness of employer and commuter reward programs in adjusting commuting behavior (see page 56).

The Council should ask for a written response from the Executive by the summer of 2009.

**Recommendation #4: Discuss the Council's long-term vision for creating an efficient and sustainable alternative commuting infrastructure and the funding sources needed to realize the vision.**

The County seeks to persuade a large number of workers to commute by alternative modes. A large scale shift in commuting practices would generate new demand for facilities and services to accommodate workers who no longer commute by single-occupant vehicle. To sustain high mode splits, the County will need to identify funding for transit, bicycle, and pedestrian network capacity increases to keep pace with increases in demand.



OLO recommends that the Council discuss its long-term vision for building transportation infrastructure and for securing the funding needed to realize that vision. For example, the viability of developing major new transit capacity, such as a new bus rapid transit line, depends on the availability of sufficient funding to bring the initiative to fruition.

As it contemplates what the County's transportation network will look like in 10 or 20 years, the Council should assess whether it expects future improvements to be built using existing revenue sources or whether new resources could be secured for major new initiatives. Any ambitious plan to greatly expand transit (and other alternative mode) capacity should also incorporate a long-term strategy to pursue Federal aid, State aid, and possibly new County- or State-authorized dedicated funding sources to help make the vision happen.

## **CHAPTER IX: AGENCY COMMENTS**

The Office of Legislative Oversight circulated a final draft of this report to the Chief Administrative Officer for Montgomery County and to the Montgomery County Planning Board. OLO appreciates the time taken by agency representatives to review the draft report and provide feedback. OLO's final report incorporates technical comments and corrections provided by County Government and Planning Department staff.

Written comments from the Chief Administrative Officer on the final draft report begin on the next page. Written comments from the Planning Director on the final draft report begin on page 95.



OFFICE OF THE COUNTY EXECUTIVE

Isiah Leggett  
*County Executive*

Timothy L. Firestine  
*Chief Administrative Officer*

MEMORANDUM

December 04, 2008

TO: Aron Trombka, Senior Legislative Analyst  
Office of Legislative Oversight

Jennifer Renkema, Research Associate  
Office of Legislative Oversight

FROM: Timothy L. Firestine, Chief Administrative Officer

SUBJECT: Draft OLO Report 2009-6, Transportation Demand Management  
Implementation, Funding, and Governance

Thank you for the opportunity to comment on Draft OLO Report 2009-6 regarding Transportation Demand Management Implementation, Funding, and Governance. The report was compiled in response to the County Council's request for an examination of the County's Transportation Demand Management (TDM) strategies and a comparison with approaches used in other communities.

The report is a very comprehensive and well-organized review of existing TDM efforts and related policies and programs in the County's urban centers. It highlights the many successful strategies the County is pursuing to reduce single occupant vehicle use in order to control traffic congestion, decrease energy consumption, and improve air quality. It also points out some of the challenges inherent in trying to optimize these efforts while at the same time addressing other County goals, such as promoting further investment in our urban centers, meeting the diverse needs of our residents and businesses, maintaining a healthy economy, and conducting fiscally-responsible government. We look forward to engaging with OLO and the County Council in a discussion of the actions the County can take to further our multiple objectives in this regard. Below are our comments on the recommendations contained in the report.

**Recommendation #1: Establish parking policies that are consistent with [the] County's transportation demand management goals.**

There are several references to the number of County owned public parking spaces and their utilization rates in the Silver Spring and Bethesda Parking Lot Districts (PLDs). The statistics quoted are accurate. They are provided, however, with no background context as to the history of their construction and past utilization rates, near term projections of future parking demand (within 5 years), or explanation of the policy behind their allocation as short-term or long-term spaces. The lack of background may erroneously indicate, to some readers, that the number of spaces in each PLD were constructed on an arbitrary basis and their short or long term allocation may be similarly arbitrary. A brief explanation of each of these issues may be helpful.

**Recommendation #1.a.: Establish a policy governing urban center parking requirements.**

The recommendation, in part, suggests the County Council should consider the following question: Should the Council amend the Zoning Ordinance to replace minimum parking requirements with maximum parking requirements in urban centers served by transit?

The overall reading of the report would indicate that the PLDs should be considered "urban centers served by transit." Other parts of the report highlight the importance of the parking Ad Valorem tax in the overall revenue structure of the PLDs. We suggest the report should acknowledge that such a radical change in the Code requirements for parking could invalidate the basis for the collection of this tax. Any limitation on the amount of parking should be structured in the framework of existing public and private parking spaces and outstanding obligations of any affected PLD, and with a clear understanding of market needs. We note that similar caveats have been provided for some of OLO'S other recommendations.

**Recommendation #1.b.: Establish a policy on public parking supply and pricing.**

The report suggests a number of possible actions may be taken including:

1. A cap on the total number of parking spaces in a PLD. Again, a concern is what affect this may have on the basis for the collection of the Ad Valorem tax and the outstanding obligations of a PLD.
2. The imposition of a surcharge for drivers that enter or exit County-operated parking facilities during peak hours. This concept is referred to in a number of places in the report. Although the idea may be technologically feasible, we are not aware of its implementation anywhere in the country. Parking is traditionally priced based on

duration of use of the facility rather than time of exit. We are not aware of any revenue collection system configured in this manner. If it is possible, the implementation of such a system may have significant capital and operating cost implications as well as adverse customer service effects.

3. Two other courses of action separately discuss variable pricing based on premium location and space duration. Currently, short-term spaces are priced higher than long-term spaces based on their premium location and customer service issues. Making long-term parking more expensive than short-term parking (by hour) may be inherently contrary to the concept of making premium spaces more expensive than non-premium spaces.

**Recommendation #2: Ask the Executive and the Planning Board to report annually on progress made toward achieving master plan commuting goals.**

The Executive Branch would be happy to report annually on progress toward achieving master plan commuting goals. Annual commuter surveys are conducted each year which provide insight into progress. Advisory committees in each TMD are kept apprised of progress throughout the year. Summary reports are prepared on a regular basis for the TMDs. These and other materials can be made available to the Council.

**Recommendation #3: Ask the Executive to evaluate transportation demand management practices used in other jurisdictions and to report to the Council on their potential applicability in Montgomery County.**

The Executive Branch has no problem in principle evaluating the examples of TDM practices used in other jurisdictions. In some cases work already has been done or is about to be done on programs of these types. Those which OLO has selected as having particular merit include:

- **The feasibility of implementing an “EcoPass” or similar employer-based transit benefit program in the County or in all areas served by WMATA.**

The County tried several years ago to launch such an employer-based pass program. As OLO aptly notes on page 54 of their report, Ride On is only one element of the County’s transit network, yet these employer-based transit passes are most successful if they are accepted by all transit providers. At the time the County attempted to implement this type of pass program earlier, efforts to obtain WMATA’s participation were unsuccessful. Discussions with employers indicated the program would be unappealing without WMATA’s participation, so it was abandoned.

However, a successful effort of a similar nature was undertaken with the Montgomery College U-Pass program. That program works because many students are able to use Ride On exclusively for their transportation to and from campus. The college collects \$2 from every student in their activity fee, which yields approximately \$550,000 annually paid to Ride On. In return, all Montgomery College students have unlimited use of Ride On by showing their current student ID card.

- **The implementation steps and funding needed to pilot transit signal prioritization for Ride On and Metrobuses.**

Transit signal prioritization is encompassed within the traffic signal system modernization project recently approved for deployment beginning in FY09 and scheduled to run through FY14. It will be coordinated with Ride On's new CAD/AVL (Computer Aided Dispatch/Automated Vehicle Locator) system, equipment which should be on all Ride On buses by the end of the calendar year. Transit signal prioritization will be implemented over time as the core signal system is replaced.

- **The effectiveness of employer and commuter reward programs in adjusting commuting behavior.**

The Executive Branch is willing to evaluate other approaches to providing economic incentives for employers and employees to use alternative modes. However, it should be noted that the "seed money" approach taken with the County's current Fare Share/Super Fare Share transit subsidy program has the advantage of leveraging employer participation over time, so that the County gradually contributes less to the transit benefits being provided, while the employer contributes more and, ultimately, takes over the entire cost of providing transit benefits to the employees. The approach taken with these programs also has been validated by national research as one of the most effective methods to accomplish mode shifts. In addition, there is benefit to the business community of retaining continuity of programs from the standpoint of planning – and the added challenge and cost of providing information and marketing of new programs to employers and employees also must be evaluated. Finally, as OLO points out, the effectiveness of a rewards program is dependent upon availability of resources to fund rewards that are large enough to affect commuter and business behavior.

Aron Trombka  
Jennifer Renkema  
December 04, 2008  
Page 5

**Recommendation #4: Discuss the Council's long-term vision for creating an efficient and sustainable alternative commuting infrastructure and the funding sources needed to realize the vision.**

The Executive Branch would be happy to contribute to this discussion in whatever way is considered most constructive. At a minimum, we will provide whatever subject matter expertise is requested.

We appreciate the opportunity to comment on this draft report, congratulate OLO on a very thorough and thought-provoking exploration, and look forward to participating in the Council's review.

TLF:slbi

cc: Arthur Holmes, Director, Department of Transportation  
Carolyn G. Biggins, Chief, Division of Transit Services  
Stephen Nash, Chief, Division of Parking Management  
Emil J. Wolanin, Chief, Traffic Engineering and Operations  
Kathleen Boucher, Assistant Chief Administrative Officer  
Diane Schwartz-Jones, Assistant Chief Administrative Officer



**MONTGOMERY COUNTY PLANNING DEPARTMENT**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Thursday, November 20, 2008

Aron Trombka, Senior Legislative Analyst  
Office of Legislative Oversight – Montgomery County  
100 Maryland Ave.  
Rockville, MD 20850

Dear Mr. Trombka:

**RE: OLO DRAFT Report 2009-6**  
**Transportation Demand Management Implementation, Funding, and Governance**

We appreciate your coordination with us on the draft study. This study provides a useful compendium of current activities and its recommendations will help further our interest in developing and implementing alternatives to auto travel in the County. The study recommendations are consistent with the objectives in the Board's 2007 Growth Policy report and will likely mirror recommendations included in the Climate Protection Plan. These separate initiatives have fairly common objectives and research and reporting efforts should be consolidated to the extent possible. We look forward to discussing these recommendations with the County Council in early 2009.

I offer three substantive comments on the report. First, the role of land use planning is included in the table of contents but not described in the text. The development of our urban centers and preservation of our agricultural reserve is the result of some four decades of careful land use planning and growth management. As environmental, economic, and fiscal constraints increase, we need to redouble our efforts on directing mixed-use development into areas best served by transit. These efforts will be prominently featured in our 2009 Growth Policy recommendations.

Second, we concur with the recommendations for focusing on parking policies. As you have noted, the development of a policy on public parking supply and pricing will require analysis similar to that proposed in the 2007 Growth Policy, but not funded. We are evaluating private parking supply in our Zoning Ordinance Revision work program.

Finally, we suggest the County also focus on technology approaches to address commuting and congestion problems. Journey to work strategies should include increased emphasis on both promoting and implementing flex time, telecommuting, and telework programs. Improved mobility analysis tools and traveler information systems



for transit services, parking availability, and roadway congestion can enable smarter commuting patterns that better match consumer demand to available supply on a real-time basis.

Detailed technical comments on the draft staff report are being submitted under separate cover. Please continue to coordinate with Dan Hardy on this effort and let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to be 'Rollin Stanley', written over a series of overlapping loops.

Rollin Stanley,  
Planning Director  
Montgomery County Planning Department

**APPENDICES**

<b>Appendix</b>	<b>Title</b>	<b>Page</b>
A	Sample Traffic Mitigation Agreement	A-1
B	Sample Traffic Mitigation Plan	B-1

## TRAFFIC MITIGATION AGREEMENT

THIS TRAFFIC MITIGATION AGREEMENT ("Agreement"), is made this \_\_\_\_\_ day of \_\_\_\_\_, 200\_, by and among (a) NAME OF APPLICANT ("Applicant"); (b) MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ("MCDOT"); and (c) MONTGOMERY COUNTY PLANNING BOARD OF THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION ("Planning Board"), a Maryland public body corporate.

### RECITALS:

This Agreement is entered into on the basis of the following facts, understandings, and intentions of the parties:

A. Applicant is the owner of a certain \_\_\_\_ acre tract of land in the \_\_\_\_ zone, located at the (give geographic location relative to major streets – e.g., "northeast quadrant of X & Y Streets") in City, Montgomery County, Maryland (the "Property").

B. Applicant proposes to redevelop the Property with three buildings consisting of \_\_\_\_\_ square feet of (describe development – e.g., "research and development, offices, residential condominiums") (the "Project"), which was the subject of an Application for Preliminary Plan of Subdivision that was captioned Preliminary Plan No. \_\_\_\_\_ (the "Preliminary Plan").

C. The Project is located in the \_\_\_\_\_ Metro Station Policy Area and in the \_\_\_\_\_ Transportation Management District.

D. On \_\_\_\_\_, 200\_ the Planning Board approved Preliminary Plan No. \_\_\_\_\_ for the Project. Attached hereto as Exhibit "A" is copy of the Planning Board's Opinion dated \_\_\_\_\_ 200\_ (the "Opinion").

E. The Opinion contains the following requirement of the Applicant:

Satisfy the master plan recommendation to participate in the \_\_\_\_\_ Transportation Management District (TMD). Submit a draft Traffic Mitigation Agreement (TMAg) with the Planning Board and MCDOT. The TMAg must be executed prior to release of building permits. The TMAg must include participation in the \_\_\_\_\_ Transportation Management Organization ("TMO"). The traffic mitigation goals for the master plan are to achieve and maintain:

- a. A XX% non-auto-driver mode share for employees.
- b. A YY% non-auto-driver mode share for multi-family residents.

NOW, THEREFORE, in consideration of the above Recitals, each of which is made a part of this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which each of the parties hereto acknowledges, and intending to be legally bound thereby, the parties hereby agree to the following in compliance with the above requirements:

1. Commencement. The obligations and requirements set forth in this Agreement shall commence upon issuance of the first Use and Occupancy certificate for the first building of the Project. Applicant shall notify DPWT and the Planning Board when receipt of the initial U&O Certificate is estimated to be within six weeks, and again when the U&O is received.

2. Participation in \_\_\_\_\_ TMO. Applicant agrees to participate with the \_\_\_\_\_ Transportation Management Organization (the "\_\_\_\_\_ TMO") to encourage and assist the \_\_\_\_\_ Transportation Management District (the "TMD") in achieving and maintaining the XX% peak period non-driver mode share goal for residents and the YY% peak period non-driver mode share for employees within the \_\_\_\_\_ Master Plan (the "Master Plan") and related goals of the TMD.

3. Appointment of Transportation Benefits Coordinator. Applicant shall designate in writing to the TMD a Transportation Benefits Coordinator (TBC) who will assist residents and employees in exercising commuting options and serve as a point of contact for TMD staff. Applicant shall arrange for an initial meeting between the TBC and TMD Staff and provide the opportunity for subsequent meetings as needed. The TBC shall plan and coordinate with the TMO staff and monitor achievement of traffic mitigation as anticipated by the Master Plan. On an ongoing basis, the TBC will interact with TMO Staff in promoting ridesharing and other alternative transportation programs in order to maximize the participation of residents and employees at the site in such programs to help the TMD meet its goals. The TBC may be a property manager or other employee with other employment duties. Applicant will ensure the TBC attends periodic meetings and training sessions held by MCDOT and/or other local or regional agencies which are related to performance of these duties and coordination with other traffic mitigation programs. Applicant will promptly notify the TMD in writing of the designated TBC(s) and any subsequent change in the TBC(s) or contact information.

4. Activities of Transportation Benefits Coordinator.

(a) Promotional Programs. The TBC will cooperate with staffs from MCDOT and the Planning Board on an ongoing basis to conduct promotional activities and information distribution for all features of the TMD program at the Project; facilitate access to residential and commercial tenants/employers and employees, and residents for purposes of informing and educating about programs and services available in the TMD; and assist with the distribution of "Welcome Packets" with information about commuting alternatives or other materials to be provided by the TMD or the County to new tenants, new employers, and new employees and residents. Applicant will provide the TMD with an updated list of tenants/employers on a semi-annual basis. Upon request, this information will be kept confidential by the TMD. Applicant will insure that all activities required of the TBC will be supported by adequate budgetary allocations so that efforts to help meet trip reduction goals of the TMD are feasible.

Promotional activities will include distribution of TMD and County information to employers and employees, and residents, through the use of displays, bulletins, brochures, notices, and the periodic hosting of ridesharing days and contests, prepared or conducted solely by the Applicant or in concert with the TMD and/or County. Applicant and the TBC will provide and facilitate use of space in the development on a periodic basis (by prior arrangement) for marketing and promotional activities of the TMD. Upon request by the County and/or TMD the TBC will also promote and arrange for the sale of discounted passes, tickets and tokens, including Ride-On passes, Metrorail Fare Cards, Metrobus passes, MARC commuter rail tickets, or other incentive programs provided by public or private institutions.

(b) Surveys. The TBC, in cooperation with the TMD and MCDOT, shall facilitate employer/employee participation in the TMD Annual Commuter Survey using a survey instrument provided by the TMD or the County. The survey shall be conducted of the transportation choices of residents and employees and related issues. Applicant and the TBC shall use best efforts to achieve an 80% response return rate from among employees and residents in the development. The TMD will tabulate and analyze this information, and provide results on the aggregate mode share profiles of employers/employees and residents in the Project upon request. [The term "best efforts" shall mean performance of such efforts with all available resources in a diligent and commercially reasonable manner; but, except as generally incident to the business of Applicant and the effort to conduct marketing activities in connection with the survey, nothing herein shall require Applicant to pay any sum of money or other economic consideration to any third party as part of its "best efforts." *Note: Wording in brackets here was added by one of the attorneys & included in some TMAGs – but is not always included.*]

5. Displays. Applicant shall provide a permanent information display in a highly-used location on the Property for commuter information and promotional material on transportation management programs in the TMD, the County and the region. If the Project has different primary access points for visitors and members of the public from those access points for employees and/or residents, a display shall be provided in each of the primary access areas to reach each of these target markets.

6. Flexible Work Hours. Applicant will encourage its commercial tenants to maintain a flextime and telework policy for those employers/employees for whom it is feasible, to allow work trips of employees to be shifted out of peak travel periods.

7. Car/Van Pool Parking. Applicant shall provide car- and van pool parking spaces in a preferred location within its parking facility and shall take other actions in concert with the TMD to promote use of this commute option. At least \_\_\_\_ such spaces shall be provided initially, with increases as necessary to meet demand.

8. Employee Parking. Applicant will make pay parking available to employees working at the Project at price points that are appropriate to discourage the use of single-occupancy-vehicles to commute to the Project. These price points shall be determined based

upon relevant research or a survey of market rates for parking conducted at least once every three years, and will be established in consultation with DOT and M-NCPPC.

*[Note: Inclusion of provisions requiring parking charges for employees is not standard at this time, but this type of provision is desirable and has been included in some TMAgs.*

*Another approach used on occasion is promoting reduced parking demand, including de-bundling parking from leasing, as in the Wisconsin Place TMAg:*

“Engaging in voluntary parking reduction programs for the office component of the development by: (a) charging market rates for parking in the parking facility, (b) encouraging employers of the office component not to pay for parking for those employees who drive to work alone, (c) encouraging office employers to subsidize parking for vanpools and carpools, (d) not requiring that tenant leases commit to a minimum number of parking spaces as a precondition to leasing space in the office building, (e) notifying prospective office tenants of alternatives to monthly parking arrangements for their employees, including information about the availability of government transit subsidy programs and other transportation benefits with the materials provided by the Friendship Heights TMD as referenced in paragraph 3 below and (f) implementing a strategy to help ensure that there will be adequate parking for retail patrons within the parking facility.”]

9. Car Sharing Space. Applicant shall provide \_\_\_ car sharing parking spaces in a preferred and highly visible location within its parking facility or in a prominent surface location convenient to the main entrance of the hospital if at all possible. Applicant shall take other actions in concert with the TMD to promote use of car sharing in conjunction with other commute options to accomplish the objectives of the TMD. In the event after \_\_\_ years no demand for car sharing is evidenced, or a car sharing program is not in place, Applicant will work with MCDOT, M-NCPPC, and the TMO to determine alternative use for these parking spaces in support of the objectives of the TMAg (e.g., car or van pool, or off-peak commuting parking) until such point as a car sharing program is feasible.

10. Live Near Your Work. Applicant will implement marketing efforts, in conjunction with MCDOT and other agencies, designed to attract employees working on site to purchase or rent housing within the Project or the nearby residential community, to increase the number of employees able to walk or bike to work, or take a short bus ride.

11. Bicycle Facilities. Applicant shall provide a secure weatherproof area in a conveniently-located, well-lit, high traffic part of the parking facility to house bicycles. Bicycle storage shall be provided for the number of bicycle parking facilities specified in Planning Board approvals or sufficient to meet demand in the event demand exceeds the number specified. No charges shall be imposed for bicycle parking.

12. Shower Facilities. Applicant shall provide shower facilities in the Project for the use of employees that bicycle or walk to the Property.



13. Real Time Transit Information Sign(s). Applicant shall provide the space and necessary electrical and technical infrastructure for (a) Real Time Transit Information signs at (a) highly-used location(s) in the Project to assist employees, residents, and visitors with commuter information. MCDOT will be responsible for installing such sign(s).

[*Note: In some cases provisions have been included requiring Applicant to pay for these signs. e.g.: "Applicant will be responsible for installing the necessary equipment, including, but not limited to, conduit and, electrical connections to allow the County to install one (1) real-time transit information sign in the bus shelter and will pay MCDOT \$20,000 for the upgrade of MCDOT's real-time transit information sign program."*]

14. Countdown Pedestrian Signal. Applicant will provide a countdown pedestrian signal as part of the renovated intersection of \_\_\_\_\_ for the Project.

15. \_\_\_\_\_ Transportation Management Organization Assistance. The TMO staff shall be available to provide transportation information, technical advice, and other forms of assistance normally provided by the TMO to sites within the \_\_\_\_\_ area, to the extent feasible within the constraints of staff and fiscal resources.

16. Annual Report. Applicant shall provide an annual summary report (1-2 pages) to MCDOT, with a copy of the TMD, on or about the anniversary of this agreement, or at another regular interval as designated by MCDOT. This report will outline the traffic mitigation program and activities conducted with the TMD during the course of the previous year, and will include the name and contact information for the current Transportation Benefits Coordinator.

17. Fees. Applicant shall pay all transportation management fees as required by law, without regard to whether this development would be construed as "new" or "existing" development at that time.

18. Duration. The provisions of this Agreement shall continue in force in perpetuity or until the Planning Board evaluates, after receipt of recommendations from MCDOT, the progress of the program and determines that components of the program, in whole or in part, are no longer appropriate or necessary.

19. Enforcement. If Applicant fails to comply with the terms and conditions of this agreement, MCDOT or the Planning Board shall be entitled to take such enforcement action against Applicant as may be permitted under the Code and other applicable law.

20. County Information Obligations. Upon request, and to the extent feasible within the constraints of staff and fiscal resources, MCDOT shall respond to inquiries from the Applicant regarding available transportation systems and facilities and shall provide the Applicant with any existing information, including printed and/or electronic materials, which MCDOT may have concerning Ride On Bus, Metrobus, Metrorail, MARC, Share-A-Ride, and any other public transportation systems or carpool and vanpool matching services now or here-

after serving the Project, in quantities sufficient to allow the Applicant to distribute to its employees, residents, and visitors.

21. Applicant's Obligations. The obligations of Applicant under this Agreement shall apply only during the period when it is the holder of a ground lease for the Property or any part thereof and only to land it leases or owns. At such time as Applicant ceases to hold a ground lease interest in the Property or any part thereof, the obligations and liabilities thereafter accruing (but not any accrued and unperformed obligations and liabilities) shall be the obligations of Applicant's successors and/or assigns, to the extent permitted by law.

22. Assignment. This Agreement is assignable, in whole or in part, by Applicant, without the consent of the Planning Board or Montgomery County. Applicant's successor(s) in interest or assignee(s) shall sign the Assignment form, attached hereto as Exhibit "B", indicating their obligation to be bound by the terms and conditions of this Agreement. A copy of the executed Assignment form shall be mailed to the Planning Board, to DPWT, and to the TMD.

23. Notices. All notices and other communications required to be given by any party under this Agreement shall be in writing and shall be deemed duly given by Certified Mail, Return Receipt Requested, Postage Prepaid, as follows:

(a) If to Applicant to:

Contact Name  
Applicant/Developer Name  
Street Address  
City, Maryland ZIP

with a copy to:

Attorney's Name, Esquire  
Law Firm LLP  
Street Address  
City, Maryland ZIP

(b) If to the Planning Board to: Chairman, Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, 8787 Georgia Avenue, Silver Spring, Maryland 20910, with a copy to Associate General Counsel, Office of the General Counsel, 8787 Georgia Avenue, Suite 205, Silver Spring, Maryland 20910.

(c) If to the MCDOT to: Director, Montgomery County Department of Transportation, Executive Office Building, 101 Monroe Street, 10th Floor, Rockville, Maryland 20850, with a copy to County Attorney's Office, 101 Monroe Street, 3<sup>rd</sup> floor, Rockville, Maryland 20850.



24. Entire Agreement. This Agreement constitutes the entire agreement between the parties and no party is liable to the other or bound in any manner by express or implied warranties, guarantees, promises, statements or representations pertaining to the subject matter hereof unless such warranties, guarantees, promises, statements or representations are expressly and specifically set forth in this Agreement.

25. Counterparts. This Agreement may be executed simultaneously in any number of counterparts, each of which shall be deemed an original but all of which shall constitute one and the same Agreement.

26. Amendments/Modifications. This Agreement can be modified only in writing signed by all the parties hereto, their heirs, successors, assigns or their designees hereunder.

27. Governing Law. This Agreement shall be governed and construed in accordance with the laws of the State of Maryland.

28. Recordation. This Agreement will be recorded in the Land Records of Montgomery County.

IN WITNESS WHEREOF, Applicant, the Planning Board and MCDOT have entered into this Agreement on the day and year first written above.

[SIGNATURE PAGE FOLLOWS ]

## SAMPLE TRAFFIC MITIGATION PLAN

Company/Organization <b>Global Solutions, Inc</b>			
Address <b>555 County Drive</b>		City <b>Silver Spring</b>	State <b>MD</b>
		Zip <b>20910</b>	
Number of Full-time Employees <b>300</b>		Part-time Employees <b>0</b>	
Submitted by <b>Tom A. Jones</b>		Title <b>President</b>	
Signature		Date <b>April 9, 2008</b>	

Here's our plan to reduce gridlock in Montgomery County by offering the selected transportation benefits to our employees. In the first column, we've placed an *E* next to the strategies that we already have in place, and *N* next to the strategies that we will implement with this year's Traffic Mitigation Plan. In the last column, we've described our current or planned efforts.

**E= Existing Strategy    N= New Strategy    \* Required Strategy**

	<u><b>Traffic Mitigation Strategy</b></u>	<u><b>Employer Description</b></u>
<b>* E</b>	Contact person designated to receive and distribute information	Ellen Davis, Human Resources Director 301-555-5555; <a href="mailto:edavis@globalsolutions.com">edavis@globalsolutions.com</a> We will notify the TMD in writing of any changes in this information
<b>* E</b>	Information on transit/pooling/other commute alternatives distributed/ posted regularly (furnished by TMD)	Information on transportation services is posted in the employee break room.
<b>* N</b>	Facilitate TMD staff presentations to employees and HR/Administrative staff on commute information/alternatives on periodic basis	We hold an annual benefits seminar in the fall. We would like TMD Staff to attend to display information and answer employee questions.
<b>* N</b>	Guaranteed Ride Home Promotion (free regional program offering emergency rides)	We promote the Guaranteed Ride Home program to our employees. We provide brochures to employees with their monthly transit benefit.
<b>* N</b>	Annual Commuter Survey distributed to employees (short survey of transportation— supplied by TMD)	[Please describe your approach to gaining 80 percent participation from your employees] We will distribute survey to our employees via e-mail from our company president. We will also send an e-mail reminder.
<b>* N</b>	ADA information provided (transportation services for people with disabilities)	We will provide disabled employees with information on the regional Metro Access program and Montgomery County's Same Day Access program.
<b>* N</b>	Permanent display area for TMD-provided bus schedules and other transportation information	We plan to install a transit map and brochure racks in our employee break room.
<b>* N</b>	Compile information on yearly TMP activities and submit Annual Report	We will maintain a file on the promotion and implementation of the strategies selected above and include in our Annual Report to DPWT.
<b>N</b>	Attendance at free CSS-sponsored meetings/ workshops permitted for designated contact person	Ms. Davis will be permitted to attend four such meetings per year.
<b>E</b>	Information on commuting alternatives provided to new employees (TMD can provide materials and/or attend orientations)	We inform new employees of our transit subsidy program and provide Metro pocket guide and Ride On route maps to assist them in transit planning.
	Free or reduced rate parking for car/vanpools offered to employees	

## SAMPLE TRAFFIC MITIGATION PLAN

	<u>Traffic Mitigation Strategy</u>	<u>Employer Description</u>
	Preferred location and/or reserved parking for car/vanpools offered to employees	
	Provision of car sharing space in highly visible location within on-site parking facility.	We provide two car sharing spaces within our surface parking area near the building entrance.
	Provision of car sharing incentives, including paying part or all of membership costs, rental costs, or similar incentives.	We provide paid car sharing membership for all our employees and provide reduced-cost rental fees through an arrangement with the provider. We encourage use of car sharing vehicles when use of transit is not feasible for business or personal appointments.
N	Bike amenities at worksite, such as racks, lockers, and showers (TMD may be able to supply)	We will arrange to have bike racks installed in our garage.
	Transit/pedestrian amenities at worksite, e.g. sidewalks, benches, etc.	
	Carpool matching for employees (as part of free region-wide matching program, or can be on-site only)	
N	Alternative work schedules: <input type="checkbox"/> Flex Time <input type="checkbox"/> Jobsharing <input type="checkbox"/> Compressed Work Week <input checked="" type="checkbox"/> Telecommute/Teleworking	We have an informal telework program that allows some employees to telework in special circumstances. We have a formal telework program that started on _____, 2004 and _____ employees currently participate in this program.
E	Tax-free monthly transit subsidies provided to employees, including Super Fare Share, Fare Share and Metrochek.	Our company participates in the County's subsidy program. We started our program on _____, 2004 and _____ of our employees are currently participating in this program. The amount of the subsidy is \$_____ including the County portion.
N	Maryland State Commuter Tax Credit for employers	TMD Staff explained that we qualify for the State's 50 percent tax credit on our contributions to employees' commuting costs. This is worth up to \$50/month per participant in tax credits. We will apply for the tax credit this tax year.
	Pre-tax payroll deduction for transit costs offered to employees (Saves employer & employee money)	
	Transit passes/tokens offered for purchase at worksite (at full or reduced price)	
	Subsidize employee parking and transit equally (if employee parking is currently subsidized, offer equal subsidy for transit costs)	
	Ozone Action Days participation (regional program to alert people to dangerous air quality days)	
	Other : Please Indicate	

**Please attach to cover letter and submit to:**

Mr. Arthur Holmes, Jr., Director,  
 Montgomery County DPWT  
 c/o Commuter Services  
 8401 Colesville Road, Suite 150,  
 Silver Spring MD 20910  
 301-565-5890 (fax)

